



South Coast Air Quality Management District

21865 Copley Drive, Diamond Bar, CA 91765-4178

(909) 396-2000 • www.aqmd.gov

June 26, 2009

Via Electronic Submittal

Mr. Gerardo Rios
U.S. EPA, Region IX
Mail Stop A-5-2
75 Hawthorne Street
San Francisco, CA 94105

Re: Proposed Revision to Title V Permit (A/N 483535) for Long Beach City, SERRF Project
(ID# 044577)

Dear Mr. Rios:

Enclosed for your 45-day review are the proposed revisions to the Title V Permit for Long Beach City, SERRF Project, located at 120 Henry Ford Ave., Long Beach, CA 90802. This revision is considered to be a de minimis significant revision and a public notice is not required. As agreed, only the relevant portions of the revised permit are enclosed as shown below. Additional information will be provided upon request.

SECTION D: PERMITS TO OPERATE

Appl. Nos.	Description
428058	Deleting condition #6 from the "waste receiving and storage system" permit unit will allow the facility to operate as a transfer station

SECTION H: PERMITS TO CONSTRUCT

Appl. Nos.	Description
483532-4	Adding an impulse cleaning system to each of the 3 municipal solid waste combustors.

The initial Title V permit for this facility was effective April 12, 2004. The proposed changes to Section D will not result in emission increases, and the proposed changes to Section H will result in emission increase of less than one pound/day of any pollutant.

This request is being made via electronic submittal in order to facilitate your review. If you have any questions or need additional information, please contact Mr. Ted Kowalczyk at (909) 396-2592 or by email at tkowalczyk@aqmd.gov.

Sincerely,

Jay Chen, P.E.
Senior Engineering Manager
Refinery & Waste Management Permitting

JC: CDT: TK

Enclosures

cc: Charles R Tripp, Bureau Manager SERRF, Long Beach City, SERRF Project
A/N 483535- TV permit revision (01)

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FACILITY PERMIT TO OPERATE LONG BEACH CITY, SERRF PROJECT

Facility Equipment and Requirements (Section D)

This section consists of a table listing all permitted equipment at the facility, facility wide requirements, all individual Permits to Operate issued to various equipment at the facility, and Rule 219-exempt equipment subject to source-specific requirements. Each permit and Rule 219-exempt equipment will list operating conditions including periodic monitoring requirements, and applicable emission limits and requirements that the equipment is subject to. Also included is the rule origin and authority of each emission limit and permit condition.

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PERMITTED EQUIPMENT LIST

THE FOLLOWING IS A LIST OF ALL PERMITS TO OPERATE AT THIS FACILITY:

Application No.	Permit No.	Equipment description	Page
406467	F56311	RESOURCE RECOVERY SYSTEM NO. 1	4
274832	R-D87608	AIR POLLUTION CONTROL SYSTEM NO. 1	11
406468	F56312	RESOURCE RECOVERY SYSTEM NO. 2	17
274833	R-D87609	AIR POLLUTION CONTROL SYSTEM NO. 2	24
406470	F56313	RESOURCE RECOVERY SYSTEM NO. 3	30
274834	R-D87610	AIR POLLUTION CONTROL SYSTEM NO. 3	37
103080	D47903	LIME RECEIVING AND STORAGE SYSTEM	43
274835	D87611	WASTE RECEIVING AND STORAGE SYSTEM BUILDING	45
103081	D47904	STANDBY AIR POLLUTION CONTROL SYSTEM	47
312316	F35537	BOTTOM ASH HANDLING/TREATMENT/ STORAGE SYSTEM	48
312317	F35591	FLYASH HANDLING, TREATMENT AND STORAGE SYSTEM	51
256070	D84221	CEMENT RECEIVING AND STORAGE SYSTEM	54
168554	D63565	WASTEWATER TREATMENT SYSTEM	56
170674	D90967	SANITARY HOLDING STATION	57
171069	D90968	AIR POLLUTION CONTROL SYSTEM	58
190427	D18150	INTERNAL COMBUSTION ENGINE	59
190426	D18149	INTERNAL COMBUSTION ENGINE	61
385591	F41727	INTERNAL COMBUSTION ENGINE	63
428058	Proposed	WASTE RECEIVING AND STORAGE SYSTEM BUILDING	64

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FACILITY WIDE CONDITION(S)

Condition(s):

1. EXCEPT FOR OPEN ABRASIVE BLASTING OPERATIONS, THE OPERATOR SHALL NOT DISCHARGE INTO THE ATMOSPHERE FROM ANY SINGLE SOURCE OF EMISSIONS WHATSOEVER ANY AIR CONTAMINANT FOR A PERIOD OR PERIODS AGGREGATING MORE THAN THREE MINUTES IN ANY ONE HOUR WHICH IS:
 - A. AS DARK OR DARKER IN SHADE AS THAT DESIGNATED NO. 1 ON THE RINGLEMANN CHART, AS PUBLISHED BY THE UNITED STATES BUREAU OF MINES; OR
 - B. OF SUCH OPACITY AS TO OBSCURE AN OBSERVER'S VIEW TO A DEGREE EQUAL TO OR GREATER THAN DOES SMOKE DESCRIBED IN SUBPARAGRAPH (A) OF THIS CONDITION.
[RULE 401]

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PERMIT TO OPERATE

**Permit No. F56311
A/N 406467**

Equipment Description:

RESOURCE RECOVERY SYSTEM NO.1 CONSISTING OF:

1. REFUSE RECEIVING HOPPER, CHARGING MUNICIPAL SOLID WASTE FIRED BOILER NO. 1.
2. COMBUSTOR/BOILER NO. 1, MUNICIPAL SOLID WASTE FIRED, L.C. STEINMUELLER, WATER WALL TYPE, WITH RECIPROCATING GRATES, TWO NATURAL GAS FIRED AUXILIARY BURNERS WITH A COMBINED RATING OF 2,200,000 SCF/DAY, A MULTI-LEVEL AMMONIA INJECTION SYSTEM, UNDER GRATE PRIMARY COMBUSTION AIR FAN THAT VENTS THE WASTE RECEIVING AND STORAGE SYSTEM, AND OVER FIRE SECONDARY COMBUSTION AIR FAN.
3. CO BURNER, STEINMUELLER, MODEL NO. SSBG40, NATURAL GAS FIRED, 14.5 MM BTU PER HOUR.
4. BOILER SECTION, WATER TUBE TYPE, CONSISTING OF A SUPERHEATER, ECONOMIZER, TUBULAR STEAM COIL AIR PREHEATER, WITH MECHANICAL AND PNEUMATIC RAPPERS, AND EACH WITH A CAPACITY OF 130,000 POUNDS PER HOUR DAILY AVERAGE OF STEAM AT 660 PSIA AND 752 DEGREES FAHRENHEIT.
5. STEAM TURBINE, IMO DELAVAL, MODEL MJ-MZ-SF, (COMMON TO RESOURCE RECOVERY SYSTEMS NO. 2 AND 3).
6. GENERATOR, GEC ALSTHOM, MODEL T216-255, 37,504 KW (COMMON TO RESOURCE RECOVERY SYSTEMS NO. 2 AND 3).
7. AQUEOUS AMMONIA STORAGE TANK, 24,000 GALLON CAPACITY (COMMON TO RESOURCE RECOVERY SYSTEMS NO. 2 AND 3).

Conditions:

1. OPERATION OF THIS EQUIPMENT SHALL BE CONDUCTED IN COMPLIANCE WITH ALL DATA AND SPECIFICATIONS SUBMITTED WITH THE APPLICATION UNDER WHICH THIS PERMIT IS ISSUED, UNLESS OTHERWISE NOTED BELOW.
[RULE 204]
2. THIS EQUIPMENT SHALL BE PROPERLY MAINTAINED AND KEPT IN GOOD OPERATING CONDITION AT ALL TIMES.
[RULE 204]

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3. THIS EQUIPMENT SHALL BE OPERATED BY PERSONNEL PROPERLY TRAINED IN ITS OPERATION. THIS FACILITY SHALL BE IN COMPLIANCE WITH THE APPLICABLE OPERATOR REQUIREMENTS AS SPECIFIED UNDER 40 CFR 60.54b.
[RULE 204; 40CFR 60 Subpart Cb]
4. THE COMBUSTOR/BOILER EQUIPMENT SHALL NOT BE OPERATED UNLESS IT IS VENTED ONLY TO AIR POLLUTION CONTROL EQUIPMENT WHICH IS IN FULL USE AND HAS BEEN ISSUED A VALID PERMIT BY THE AQMD.
[RULE 402; RULE 1303(a)(1)-BACT]
5. THE COMBUSTOR/BOILER EQUIPMENT SHALL NOT BE OPERATED UNLESS ALL OF ITS PRIMARY COMBUSTION AIR IS VENTED FROM THE TIPPING HALL AND THE MUNICIPAL SOLID WASTE (REFUSE) PIT OF THE REFUSE RECEIVING AND STORAGE SYSTEM.
[RULE 402]
6. THIS EQUIPMENT MAY ONLY BE USED TO BURN REFUSE COLLECTED FROM RESIDENTIAL SOURCES, COMMERCIAL SOURCES AND OTHER SOURCES AS APPROVED AND IN A MANNER PRESCRIBED IN WRITING BY THE AQMD. ANY MATERIAL SPECIFICALLY DESIGNATED AS HAZARDOUS MATERIAL OR HAZARDOUS WASTE SHALL NOT BE BURNED UNLESS OTHERWISE APPROVED AND IN A MANNER PRESCRIBED IN WRITING BY THE AQMD.
[RULE 204; RULE 1402; 40CFR 60 Subpart Cb]
7. ALL MATERIALS THAT ARE LISTED AS HAZARDOUS BY A FEDERAL OR STATE AGENCY OR APPEAR ON A FEDERAL OR STATE CANDIDATE LIST SHALL BE CONSIDERED "HAZARDOUS MATERIAL" FOR THE PURPOSE OF THIS PERMIT.
[RULE 204]
8. NATURAL GAS SHALL BE FIRED IN THIS COMBUSTOR ONLY FOR THE SUPPORT OF GOOD COMBUSTION OF REFUSE AND FOR PERIODS OF WARM-UP, START-UP AND SHUTDOWN. NATURAL GAS SHALL NOT BE USED FOR THE SOLE PURPOSE OF GENERATING POWER. DAILY NATURAL GAS CONSUMPTION SHALL BE MEASURED AND RECORDED.
[RULE 1303(a)(1)-BACT; RULE 1303(b)(2)-OFFSET]
9. DURING THE WARM-UP PERIOD, NATURAL GAS FIRING MAY CONTINUE UNTIL THE STEAM TURBINE REACHES FULL LOAD. FOR THE PURPOSE OF THIS PERMIT, A WARM-UP SHALL BE DEFINED AS THE PERIOD OF TIME FROM WHICH THE NATURAL GAS BURNER IS INITIALLY FIRED TO THE TIME REFUSE IS FIRST INTRODUCED INTO THE FURNACE.
[RULE 1303(a)(1)-BACT]
10. START-UP BEGINS WHEN THE FACILITY STARTS THE CONTINUOUS BURNING OF REFUSE AND DOES NOT INCLUDE ANY WARM UP PERIOD.
[40CFR 60 Subpart Eb]
11. SHUTDOWN BEGINS WHEN THE FACILITY CEASES REFUSE CHARGING TO THE COMBUSTOR, UNTIL COMPLETE REFUSE BURNOUT IS ACHIEVED. DURING SHUTDOWN, THE COMBUSTOR SHALL BURN NATURAL GAS UNTIL ALL REFUSE ON THE GRATES HAS BEEN COMBUSTED.
[RULE 1303(a)(1)-BACT; 40CFR 60 Subpart Eb]

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12. THE APPLICABLE STANDARDS OF PERFORMANCE UNDER 40CFR 60 SUBPARTS Cb AND Eb, SHALL APPLY AT ALL TIMES EXCEPT DURING PERIODS OF START-UP, SHUTDOWN, OR MALFUNCTION. THE DURATION OF START-UP, SHUTDOWN OR MALFUNCTION PERIODS SHALL COMPLY WITH 40CFR 60 SUBPART Eb SECTION 60.58b.
[40CFR 60 Subpart Cb; 40CFR 60 Subpart Eb]
13. THE COMBUSTOR/BOILER EQUIPMENT SHALL NOT BE OPERATED UNLESS THE SELECTIVE NON-CATALYTIC REDUCTION (SNCR) SYSTEM IS IN OPERATION, EXCEPT DURING THE PERIODS OF WARM-UP, SHUTDOWN OR WHEN THE FLUE GAS TEMPERATURE IS LESS THAN 1,200 DEGREES FAHRENHEIT.
[RULE 1303(a)(1)-BACT]
14. RESIDUE FROM THE GRATES, BOILER HOPPERS, AND SIFTINGS FROM UNDER THE GRATES SHALL BE DISCHARGED ONLY INTO AN ASH QUENCH TANK.
[RULE 402]
15. THE OWNER OR OPERATOR SHALL MAINTAIN AND OPERATE A CONTINUOUS LOAD MONITOR AND RECORDER IN A MANNER PRESCRIBED IN 40 CFR 60.58b, TO MEASURE AND RECORD STEAM FLOW OR FEEDWATER FLOW RATE TO DETERMINE THAT THE RESOURCE RECOVERY SYSTEM IS NOT OPERATING AT A LOAD LEVEL GREATER THAN 110 PERCENT OF THE MAXIMUM DEMONSTRATED MUNICIPAL WASTE COMBUSTOR UNIT LOAD AS DEFINED IN 40 CFR 60.51b EXCEPT AS SPECIFIED UNDER 40 CFR 60.53b(b). THE STEAM FLOW OR FEEDWATER FLOW SHALL BE CALCULATED IN 4-HOUR BLOCK ARITHMETIC AVERAGES.
[40CFR 60 Subpart Cb]
16. THE COMBUSTOR/BOILER SHALL BE OPERATED TO PROVIDE A MINIMUM GAS RETENTION TIME OF ONE SECOND AT A TEMPERATURE ABOVE 1,800 DEGREES FAHRENHEIT, AS SHOWN BY A MINIMUM ROOF TEMPERATURE READING OF 1,000 DEGREES FAHRENHEIT, EXCEPT DURING WARM-UP, START-UP AND SHUTDOWN.
[RULE 1303(a)(1)-BACT]
17. VISIBLE FUGITIVE ASH EMISSIONS FROM AN ASH CONVEYING SYSTEM SHALL NOT EXCEED 5 PERCENT OF THE OBSERVATION PERIOD WHICH IS DEFINED IN 40 CFR 60.58b(k), EXCEPT DURING MAINTENANCE AND REPAIR OF ASH CONVEYING SYSTEMS.
[RULE 402; 40CFR 60 Subpart Cb]
18. ALL RECORDS REQUIRED BY THIS PERMIT OR 40 CFR 60.59b, AS APPLICABLE, INCLUDING BUT NOT LIMITED TO CONDITION NOS. 23 THROUGH 31, SHALL BE MAINTAINED AND KEPT ON FILE FOR A PERIOD OF AT LEAST FIVE YEARS AND SHALL BE MADE AVAILABLE TO AQMD PERSONNEL UPON REQUEST.
[RULE 204; 40CFR 60 Subpart Cb]
19. THE OWNER OR OPERATOR SHALL COMPLY WITH THE MUNICIPAL WASTE COMBUSTOR OPERATING PRACTICE REQUIREMENTS LISTED IN 40 CFR PART 60.53b (b) AND (c).
[40CFR 60 Subpart Cb]

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20. THE OWNER OR OPERATOR SHALL COMPLY WITH THE MUNICIPAL WASTE COMBUSTOR OPERATOR TRAINING AND CERTIFICATION REQUIREMENTS LISTED IN 40 CFR 60.54b (a) THROUGH (g).
[40CFR Subpart Cb]

Periodic Monitoring:

21. THE OPERATOR SHALL CONDUCT AN INSPECTION FOR VISIBLE EMISSIONS FROM ALL STACKS AND OTHER EMISSION POINTS OF THIS EQUIPMENT WHENEVER THERE IS A PUBLIC COMPLAINT OF VISIBLE EMISSIONS, WHENEVER VISIBLE EMISSIONS ARE OBSERVED, AND ON A SEMI-ANNUAL BASIS, AT LEAST, UNLESS THE EQUIPMENT DID NOT OPERATE DURING THE ENTIRE SEMI-ANNUAL PERIOD. THE ROUTINE SEMI-ANNUAL INSPECTION SHALL BE CONDUCTED WHILE THE EQUIPMENT IS IN OPERATION AND DURING DAYLIGHT HOURS. IF ANY VISIBLE EMISSIONS (NOT INCLUDING CONDENSED WATER VAPOR) ARE DETECTED THAT LAST MORE THAN THREE MINUTES IN ANY ONE-HOUR, THE OPERATOR SHALL EITHER:
- A. VERIFY AND CERTIFY WITHIN 24 HOURS THAT THE EQUIPMENT CAUSING THE EMISSION AND ANY ASSOCIATED AIR POLLUTION CONTROL EQUIPMENT ARE OPERATING NORMALLY ACCORDING TO THEIR DESIGN AND STANDARD PROCEDURES AND UNDER THE SAME CONDITIONS UNDER WHICH COMPLIANCE WAS ACHIEVED IN THE PAST;
 - B. TAKE CORRECTIVE ACTION(S) THAT ELIMINATES THE VISIBLE EMISSIONS WITHIN 24 HOURS AND REPORT THE VISIBLE EMISSIONS AS A POTENTIAL DEVIATION IN ACCORDANCE WITH THE REPORTING REQUIREMENTS IN SECTION K OF THIS PERMIT; OR
 - C. HAVE A CARB-CERTIFIED SMOKE READER DETERMINE COMPLIANCE WITH THE OPACITY STANDARD, USING EPA METHOD 9 OR THE PROCEDURES IN THE CARB MANUAL "VISIBLE EMISSION EVALUATION", WITHIN THREE BUSINESS DAYS AND REPORT ANY DEVIATIONS TO AQMD.

THE OPERATOR SHALL KEEP THE RECORDS IN ACCORDANCE WITH THE RECORDKEEPING REQUIREMENTS IN SECTION K OF THIS PERMIT AND THE FOLLOWING RECORDS:

- A. STACK OR EMISSION POINT IDENTIFICATION;
- B. DESCRIPTION OF ANY CORRECTIVE ACTIONS TAKEN TO ABATE VISIBLE EMISSIONS;
- C. DATE AND TIME VISIBLE EMISSION WAS ABATED; AND
- D. VISIBLE EMISSION OBSERVATION RECORDED BY A CERTIFIED SMOKE READER.
[RULE 3004 (a)(4)]

Emissions And Requirements:

22. THIS EQUIPMENT IS SUBJECT TO THE APPLICABLE REQUIREMENTS OF THE FOLLOWING RULES AND REGULATION:

PM: RULE 404, SEE APPENDIX B FOR EMISSION LIMITS
PM: RULE 405, SEE APPENDIX B FOR EMISSION LIMITS
PM: 0.1 gr/scf, RULE 409
PM: 11 lb/hr AND 0.01 gr/scf, RULE 475
PM: 11 lb/hr AND 0.01 gr/scf, RULE 476
PM: 0.18 g/dscm, CORRECTED TO 12% CO₂, 40 CFR Subpart E

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CO: 2000 PPMv, RULE 407
SOx: 500 PPMv, RULE 407
NOx: 225 PPMv, RULE 476

23. THE OPERATOR SHALL RECORD THE FOLLOWING PARAMETERS AND MAKE THEM AVAILABLE FOR SUBMITTAL TO THE ADMINISTRATOR OR ON-SITE REVIEW BY AN INSPECTOR:
- A) ALL 6-MINUTE AVERAGE OPACITY LEVELS AS SPECIFIED IN 60.58b(c).
 - B) ALL 1-HOUR AVERAGE SO_x EMISSION CONCENTRATIONS AS SPECIFIED UNDER 60.58b(e).
 - C) ALL 1-HOUR AVERAGE NO_x EMISSION CONCENTRATIONS AS SPECIFIED UNDER 60.58b(h).
 - D) ALL 1-HOUR AVERAGE CO EMISSION CONCENTRATIONS, MUNICIPAL WASTE COMBUSTOR UNIT LOAD MEASUREMENTS, AND PARTICULATE MATTER CONTROL DEVICE INLET TEMPERATURES AS SPECIFIED UNDER 60.58b(i).
- [40CFR 60 Subpart Eb, Section 60.59b]
24. THE OPERATOR SHALL COMPUTE AND RECORD THE FOLLOWING AVERAGES AND PERCENT REDUCTIONS AND MAKE THEM AVAILABLE FOR SUBMITTAL TO THE ADMINISTRATOR OR ON-SITE REVIEW BY AN INSPECTOR:
- A) ALL 24-HOUR DAILY GEOMETRIC AVERAGE SO_x EMISSION CONCENTRATIONS AND ALL 24-HOUR DAILY GEOMETRIC AVERAGE PERCENT REDUCTIONS IN SO_x EMISSIONS AS SPECIFIED IN 60.58b(e).
 - B) ALL 24-HOUR DAILY ARITHMETIC AVERAGE NO_x EMISSION CONCENTRATIONS AS SPECIFIED IN 60.58b(h).
 - C) ALL 4-HOUR BLOCK OR 24-HOUR DAILY ARITHMETIC AVERAGE CO EMISSION CONCENTRATIONS, AS APPLICABLE, AS SPECIFIED UNDER 60.58b(i).
 - D) ALL 4-HOUR BLOCK ARITHMETIC AVERAGE MUNICIPAL WASTE COMBUSTOR UNIT LOAD LEVELS AND PARTICULATE MATTER CONTROL DEVICE INLET TEMPERATURES AS SPECIFIED UNDER 60.58b(i).
- [40CFR 60 Subpart Eb, Section 60.59b]
25. THE OPERATOR SHALL IDENTIFY THE CALENDAR DATES WHEN ANY OF THE AVERAGE EMISSION CONCENTRATIONS, PERCENT REDUCTIONS, OR OPERATING PARAMETERS RECORDED UNDER (d)(2)(ii)(A) THROUGH (d)(2)(ii)(E) OR THE OPACITY LEVELS RECORDED UNDER (d)(2)(i)(A) OF SECTION 60.59b ARE ABOVE APPLICABLE LIMITS, WITH REASONS FOR SUCH EXCEEDENCES AND A DESCRIPTION OF CORRECTIVE ACTIONS TAKEN.
- [40CFR 60 Subpart Eb, Section 60.59b]
26. THE OPERATOR SHALL IDENTIFY CALENDAR DATES FOR WHICH THE MINIMUM NUMBER OF HOURS OF ANY OF THE DATA SPECIFIED IN PARAGRAPHS SECTION 60.59b (d)(6)(i) THROUGH (d)(6)(v) HAVE NOT BEEN OBTAINED INCLUDING REASONS FOR NOT OBTAINING SUFFICIENT DATA AND A DESCRIPTION OF CORRECTIVE ACTIONS TAKEN.
- [40CFR 60 Subpart Eb, Section 60.59b]

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27. THE OPERATOR SHALL IDENTIFY EACH OCCURRENCE THAT SO_x AND NO_x EMISSIONS DATA OR OPERATIONAL DATA (CO EMISSIONS, UNIT LOAD, AND PARTICULATE MATTER CONTROL DEVICE TEMPERATURE) HAVE BEEN EXCLUDED FROM THE CALCULATION OF AVERAGE EMISSION CONCENTRATIONS OR PARAMETERS, AND THE REASONS FOR EXCLUDING THE DATA.
[40CFR 60 Subpart Eb, Section 60.59b]
28. THE OPERATOR SHALL RECORD THE RESULTS OF DAILY DRIFT TESTS AND QUARTERLY ACCURACY DETERMINATIONS FOR SO_x, NO_x AND CO CEMS AS REQUIRED BY APPENDIX F OF THIS SECTION 60.59b, PROCEDURE I.
[40CFR 60 Subpart Eb, Section 60.59b]
29. THE OPERATOR SHALL RECORD THE TEST REPORTS DOCUMENTING THE RESULTS OF THE INITIAL PERFORMANCE TEST AND ALL ANNUAL PERFORMANCE TESTS LISTED IN SECTION 60.59b (d)(9)(i) AND (d)(9)(ii) ALONG WITH SUPPORTING CALCULATIONS.
[40CFR 60 Subpart Eb, Section 60.59b]
30. THE OPERATOR SHALL RECORD THE FOLLOWING:
- A) RECORDS SHOWING THE NAMES OF THE MW COMBUSTOR CHIEF FACILITY OPERATOR, SHIFT SUPERVISORS, AND CONTROL ROOM OPERATORS WHO HAVE BEEN PROVISIONALLY CERTIFIED BY AN APPROVED CERTIFICATION PROGRAM AS REQUIRED BY 60.54b(a) INCLUDING DATES IF INITIAL AND RENEWAL CERTIFICATIONS.
 - B) RECORDS SHOWING THE NAMES OF THE MW COMBUSTOR CHIEF FACILITY OPERATOR, SHIFT SUPERVISORS, AND CONTROL ROOM OPERATORS WHO HAVE BEEN FULLY CERTIFIED BY AN APPROVED CERTIFICATION PROGRAM AS REQUIRED BY 60.54b(a) INCLUDING DATES IF INITIAL AND RENEWAL CERTIFICATIONS.
 - C) RECORDS SHOWING THE NAMES OF THE MW COMBUSTOR CHIEF FACILITY OPERATOR, SHIFT SUPERVISORS, AND CONTROL ROOM OPERATORS WHO HAVE COMPLETED THE EPA MW COMBUSTOR OPERATOR TRAINING OR APPROVED EQUIVALENT COURSE AS REQUIRED BY 60.54b(d) INCLUDING DOCUMENTATION OF TRAINING COMPLETION.
- [40CFR 60 Subpart Eb, Section 60.59b]
31. THE OPERATOR SHALL RECORD THE NAMES OF PERSONS THAT HAVE COMPLETED A REVIEW OF THE OPERATIONS MANUAL AS REQUIRED BY 60.54b(f).
[40CFR 60 Subpart Eb, Section 60.59b]
32. CONTROLLED EMISSIONS OF OXIDES OF SULFUR (SO_x) FROM THE COMBUSTOR/BOILER SHALL NOT EXCEED THE MORE STRINGENT OF 17 LB/HR OR 70 PPM, DRY CORRECTED TO 12% CO₂ (3 HOUR AVERAGE), AND THE MORE STRINGENT OF 12 LB/HR OR 26 PPM, DRY CORRECTED TO 12 % CO₂ (8 HOUR AVERAGE).
[RULE 1703 – PSD Analysis]
[40CFR – 52-21 PSD]

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33. CONTROLLED EMISSIONS OF THE FOLLOWING POLLUTANTS IN THE EXHAUST FROM THE SYSTEM SHALL NOT EXCEED THE LIMITS SPECIFIED BELOW:

LEAD	0.08 LBS/HR (3-HOUR AVERAGE)
MERCURY	0.12 LBS/HR ((3-HOUR AVERAGE)
FLUORIDES (AS HYDROGEN FLUORIDE)	1.1 LBS/HR (3-HOUR AVERAGE)
[RULE 1703 – PSD Analysis]	
[40CFR – 52-21 PSD]	

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PERMIT TO OPERATE

**Permit No. R-D87608
A/N 274832**

Equipment Description:

AIR POLLUTION CONTROL SYSTEM NO. 1 CONSISTING OF:

1. ROTARY ATOMIZER NO. 1 WITH CYCLONE INLETS VENTING COMBUSTOR/BOILER NO. 1.
2. SPRAY REACTOR TYPE REACTORS WITH CALCIUM HYDROXIDE INJECTION, EACH SERVING ROTARY ATOMIZER NO. 1.
3. BAGHOUSE NO. 1, WITH TEN COMPARTMENTS, REVERSE AIR CLEANING, 73,416 SQ. FT. OF FILTER AREA.
4. INDUCED DRAFT FAN NO. 1 VENTING RESOURCE RECOVERY SYSTEM NO. 1.

Conditions:

1. OPERATION OF THIS EQUIPMENT SHALL BE CONDUCTED IN COMPLIANCE WITH ALL DATA AND SPECIFICATIONS SUBMITTED WITH THE APPLICATION UNDER WHICH THIS PERMIT IS ISSUED UNLESS OTHERWISE NOTED BELOW.
[RULE 204]
2. THIS EQUIPMENT SHALL BE PROPERLY MAINTAINED AND KEPT IN GOOD OPERATING CONDITION AT ALL TIMES.
[RULE 204]
3. THE OWNER OR OPERATOR SHALL COMPLY WITH THE MUNICIPAL WASTE COMBUSTOR OPERATING PRACTICE REQUIREMENTS LISTED IN 40 CFR 60.53b (b) AND (c).
[40CFR 60 Subpart Cb]
4. THE OWNER OR OPERATOR SHALL COMPLY WITH THE MUNICIPAL WASTE COMBUSTOR OPERATOR TRAINING AND CERTIFICATION REQUIREMENTS LISTED IN 40 CFR 60.54b (a) THROUGH (g).
[40CFR Subpart Cb]
5. DUST OR FLYASH COLLECTED IN THE BAGHOUSE COMPARTMENT HOPPERS AND THE SPRAY REACTOR HOPPER SHALL BE DISCHARGED ONLY INTO CLOSED CONVEYORS AND/OR CONTAINERS EXCEPT DURING MAINTENANCE AND REPAIR OF ASH CONVEYING SYSTEMS.
[RULE 402; RULE 1303(a)(1)-BACT]
6. A GAUGE SHALL BE MAINTAINED TO INDICATE, IN INCHES OF WATER PRESSURE, THE STATIC PRESSURE DIFFERENTIAL ACROSS THE BAGS.
[RULE 1303(a)(1)-BACT]

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7. THE VOLUME OF LIME SLURRY SUPPLIED TO THE ATOMIZERS FOR SO₂ CONTROL SHALL BE CONTINUOUSLY MEASURED AND RECORDED.
[RULE 1303(a)(1)-BACT]
8. A CONTINUOUS MONITORING SYSTEM TO MONITOR AND RECORD MASS EMISSIONS AND CONCENTRATIONS OF NITROGEN OXIDES (NO_x), OXIDES OF SULFUR (SO_x) AND CARBON MONOXIDE (CO) IN THE EXHAUST OF THE COMBUSTOR/BOILER STACK, SHALL BE MAINTAINED AND OPERATED IN A MANNER PRESCRIBED IN 40 CFR 60.58b.
[RULE 476; 40CFR 60 Subpart Cb]
9. A CONTINUOUS OXYGEN MONITOR AND RECORDER, AS APPROVED BY THE AQMD, SHALL BE MAINTAINED AND OPERATED IN A MANNER PRESCRIBED IN 40 CFR 60.58b TO MEASURE CONCENTRATIONS OF OXYGEN IN THE EXHAUST OF THE COMBUSTOR/BOILER STACK.
[40CFR 60 Subpart Cb]
10. A SYSTEM, AS APPROVED BY THE AQMD, SHALL BE OPERATED TO CONVERT AND RECORD THE STACK NITROGEN OXIDES CONCENTRATIONS TO 3% OXYGEN ON A DRY BASIS AND REPORT THE RESULTS IN A MANNER WHICH DEMONSTRATES COMPLIANCE WITH RULE 476.
[RULE 476]
11. THE OWNER OR OPERATOR SHALL MAINTAIN AND OPERATE A CONTINUOUS OPACITY MONITOR AND RECORDER IN A MANNER PRESCRIBED IN 40 CFR 60.58b TO MEASURE OPACITY OF FLUE GAS IN THE EXHAUST OF THE COMBUSTOR/BOILER STACK. THE MEASURED OPACITY SHALL NOT EXCEED 10 PERCENT IN 6-MINUTE AVERAGE.
[40CFR 60 Subpart Cb]
12. THE OWNER OR OPERATOR SHALL MAINTAIN AND OPERATE A CONTINUOUS TEMPERATURE MONITOR IN A MANNER PRESCRIBED IN 40 CFR 60.58b TO MONITOR THE TEMPERATURE OF THE FLUE GAS STREAM AT THE INLET TO EACH PARTICULATE MATTER CONTROL DEVICE FOR THE RESOURCE RECOVERY SYSTEM. THE MONITORED TEMPERATURE SHALL NOT EXCEED 17 DEGREES IN CELSIUS (4-HR BLOCK AVERAGE) ABOVE THE MAXIMUM DEMONSTRATED PARTICULATE MATTER CONTROL DEVICE TEMPERATURE AS DEFINED IN 40 CFR 60.51b EXCEPT AS SPECIFIED UNDER 40 CFR 60.53b(c).
[40CFR 60 Subpart Cb]
13. ALL CONTINUOUS EMISSION MONITORS SHALL BE OPERATED IN ACCORDANCE WITH THE REQUIREMENTS AND OPERATING PROCEDURES AS APPROVED BY THE AQMD.
[40CFR 60 Subpart Cb]
14. CONTROLLED EMISSIONS OF OXIDES OF NITROGEN (NO_x) IN THE AIR POLLUTION CONTROL SYSTEM EXHAUST FROM THIS SYSTEM SHALL NOT EXCEED 225 PPM (15 MINUTES AVERAGE) AT 3% OXYGEN ON A DRY BASIS.
[RULE 476; RULE 1303(b)(2)-OFFSET]

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15. CONTROLLED NO_x EMISSIONS IN THE EXHAUST FROM THE SYSTEM SHALL NOT EXCEED 205 PPMV CORRECTED TO 7% OXYGEN ON A DRY BASIS. WHEN AVERAGING EMISSIONS FROM ALL COMBUSTORS AS ALLOWED IN PART 60.33b(d) OF 40 CFR SUBPART Cb, THE AVERAGED NO_x EMISSIONS SHALL NOT EXCEED 180 PPMV CORRECTED TO 7% OXYGEN ON A DRY BASIS (24-HR DAILY ARITHMETIC AVERAGE).
 [40CFR 60 Subpart Cb]
16. CONTROLLED EMISSIONS OF OXIDES OF SULFUR (SO_x) FROM THE COMBUSTOR/BOILER SHALL NOT EXCEED THE MORE STRINGENT OF 17 LB/HR OR 70 PPM, DRY CORRECTED TO 12% CO₂ (3 HOUR AVERAGE), AND THE MORE STRINGENT OF 12 LB/HR OR 26 PPM, DRY CORRECTED TO 12 % CO₂ (8 HOUR AVERAGE).
 [RULE 1303(b)(2)-OFFSET]
17. CONTROLLED EMISSIONS OF THE FOLLOWING POLLUTANTS IN THE EXHAUST FROM THE SYSTEM SHALL NOT EXCEED THE LIMITS SPECIFIED BELOW. THE FOLLOWING LIMITS ARE CORRECTED TO 7% OXYGEN ON A DRY BASIS UNLESS OTHERWISE INDICATED:
- | | |
|-------------------------------------|---|
| OXIDES OF SULFUR (SO _x) | 29 PPMV OR 75% WT. REDUCTION (24-HR DAILY GEOMETRIC MEAN) |
| PARTICULATE MATTERS (PM) | 27 mg/DSCM |
| DIOXIN/FURAN | 30 ng/DSCM |
| CADMIUM | 0.04 mg/DSCM |
| LEAD | 0.44 mg/DSCM |
| MERCURY | 0.08 mg/DSCM OR 85% WT. REDUCTION |
| HYDROGEN CHLORIDE | 29 PPMV OR 95% WT. REDUCTION |
| FLUORIDE (AS HF) | 1.1 LBS/HOUR |
- [40CFR 60 Subpart Cb]
18. CONTROLLED EMISSIONS OF CARBON MONOXIDE (CO) IN THE EXHAUST FROM THE SYSTEM SHALL NOT EXCEED 100 PPMV (4-HR ARITHMETIC AVERAGE) CORRECTED TO 7% OXYGEN ON A DRY BASIS.
 [40CFR 60 Subpart Cb]
19. THE CONTROLLED EMISSIONS IN THE EXHAUST FROM THIS SYSTEM SHALL NOT EXCEED THE FOLLOWING LIMITS:
- | <u>CONTAMINANT</u> | <u>LB/DAY</u> |
|----------------------|---------------|
| NITROGEN OXIDES | 816 |
| PM ₁₀ | 120 |
| SULFUR OXIDES | 288 |
| CARBON MONOXIDE | 792 |
| REACTIVE ORGANIC GAS | 72 |
| HYDROGEN CHLORIDE | 204 |
- [RULE 1303(b)(2)-OFFSET]

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20. VISIBLE FUGITIVE ASH EMISSIONS FROM AN ASH CONVEYING SYSTEM SHALL NOT EXCEED 5 PERCENT OF THE OBSERVATION PERIOD WHICH IS DEFINED IN 40 CFR 60.58b(k), EXCEPT DURING MAINTENANCE AND REPAIR OF ASH CONVEYING SYSTEMS.
[40CFR 60 Subpart Cb]
21. THE AQMD APPROVED SAMPLING PORTS SHALL BE MAINTAINED IN THE FOLLOWING LOCATIONS:
- A. IN THE DUCT FOLLOWING THE COMBUSTOR/BOILER BUT PRECEDING THE SPRAY REACTOR;
 - B. IN THE DUCT FOLLOWING THE SPRAY REACTOR BUT PRECEDING THE BAGHOUSE;
 - C. IN THE EXHAUST STACK;
 - D. IN THE COMBUSTION AIR INLET DUCT BETWEEN THE INTAKE AND THE COMBUSTOR.
[RULE 204]
22. THE OWNER OR OPERATOR OF SOUTHEAST RESOURCE RECOVERY FACILITY (SERRF) SHALL CONDUCT PERFORMANCE TESTS ON AN ANNUAL BASIS IN ACCORDANCE WITH THE AQMD TEST PROCEDURES AND 40 CFR 60.58b. WRITTEN NOTICE OF SUCH PERFORMANCE TESTS SHALL BE PROVIDED TO THE AQMD SEVEN (7) DAYS PRIOR TO THE TEST SO THAT AN OBSERVER MAY BE PRESENT.

THE PERFORMANCE TESTS SHALL INCLUDE, BUT MAY NOT BE LIMITED TO, A TEST OF ONE OF THE THREE COMBUSTOR/BOILER EXHAUST STREAMS FOLLOWING THE BAGHOUSE UNLESS OTHERWISE REQUESTED BELOW FOR THE FOLLOWING POLLUTANTS:

- A. HYDROCARBONS
- B. PARTICULATE MATTER
- C. HYDROGEN CHLORIDE
- D. EXHAUST FLOW RATE, WET AND DRY
- E. POLYNUCLEAR AROMATIC HYDROCARBONS (BENZO-A-PYRENE, BENZO-E-PYRENE, BENZO-A-ANTHRACENE AND CORONENE).
- F. TETRA- THROUGH OCTA-CHLORINATED DIBENZO-P-DIOXINS AND DIBENZOFURANS
- G. HEAVY METALS (ARSENIC, BERYLLIUM, CADMIUM, CHROMIUM, COPPER, LEAD, MERCURY, NICKEL, AND ZINC)
- H. OPACITY
- I. FLUE GAS TEMPERATURE AT THE INLET TO THE BAGHOUSE DURING DIOXIN/FURAN TEST
- J. LOAD LEVEL (STEAM FLOW OR FEEDWATER FLOW) DURING DIOXIN/FURAN TEST
- K. OXIDES OF NITROGEN (NO_x)
- L. OXIDES OF SULFUR (SO_x)
- M. CARBON MONOXIDE
- N. FUGITIVE ASH USING EPA METHOD 22

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IF THE PERFORMANCE TESTS OF ALL THREE COMBUSTION UNITS DEMONSTRATE THAT DIOXIN/FURAN EMISSIONS ARE LESS THAN OR EQUAL TO 7 ng/DSCM (TOTAL MASS) FOR A 2-YEAR PERIOD, THE OWNER OR OPERATOR MAY ELECT TO CONDUCT ANNUAL PERFORMANCE TEST ON ONLY ONE OF THE THREE UNITS. UNDER THIS ALTERNATIVE TESTING SCHEDULE, A DIFFERENT UNIT SHALL BE TESTED IN SEQUENCE EACH YEAR. IF ANY ANNUAL TEST INDICATES DIOXIN/FURAN EMISSIONS EXCEED 7 ng/DSCM (TOTAL MASS), PERFORMANCE TESTS SHALL BE CONDUCTED ON ALL THREE COMBUSTION UNITS UNTIL SERRF CAN QUALIFY FOR THE ALTERNATIVE TESTING SCHEDULE.

[RULE 1303(a)(1)-BACT; 40CFR 60 Subpart Cb]

23. THE OWNER OR OPERATOR OF SERRF SHALL SUBMIT WRITTEN RESULTS OF THE PERFORMANCE TESTS TO THE AQMD BY FEBRUARY 1ST OF EACH YEAR FOLLOWING THE CALENDAR YEAR IN WHICH THE TESTS WERE CONDUCTED. THE OWNER OR OPERATOR OF SERRF SHALL ALSO COMPLY WITH THE REPORTING AND RECORDKEEPING REQUIREMENTS SPECIFIED IN 40 CFR 60.59b, AS APPLICABLE.

[RULE 1303(a)(1)-BACT; 40CFR 60 Subpart Cb]

24. ALL RECORDS REQUIRED BY THIS PERMIT OR 40 CFR 60.59b, AS APPLICABLE, SHALL BE MAINTAINED AND KEPT ON FILE FOR A PERIOD OF AT LEAST FIVE YEARS AND BE MADE AVAILABLE TO AQMD PERSONNEL UPON REQUEST.

[RULE 204; 40CFR 60 Subpart Cb]

Periodic Monitoring:

25. THE OPERATOR SHALL USE THIS EQUIPMENT IN SUCH A MANNER THAT THE DIFFERENTIAL PRESSURE ACROSS THE FILTER DOES NOT EXCEED 15 INCHES WATER COLUMN. THE OPERATOR SHALL DETERMINE AND RECORD THE PARAMETER BEING MONITORED ONCE EVERY WEEK.

[RULE 3004 (a)(4)]

26. THE OPERATOR SHALL PERFORM A BIENNIAL INSPECTION OF THE EQUIPMENT AND BAGS FOR LEAKS, BROKEN OR TORN BAGS AND IMPROPERLY INSTALLED BAGS. ADDITIONAL INSPECTION SHALL BE CONDUCTED WHEN THE STACK OPACITY AS MEASURED BY THE CONTINUOUS OPACITY MONITORING SYSTEM EXCEEDS 5% FOR ONE HOUR OR MORE. THE OPERATOR SHALL KEEP RECORDS, IN A MANNER APPROVED BY THE DISTRICT, FOR THE FOLLOWING PARAMETER(S) OR ITEM(S):

A. THE NAME OF THE PERSON PERFORMING THE INSPECTION AND/OR MAINTENANCE OF THE BAGS;

B. THE DATE, TIME AND RESULTS OF THE INSPECTION; AND THE DATE, TIME AND DESCRIPTION OF ANY MAINTENANCE OR REPAIRS RESULTING FROM THE INSPECTION.

[RULE 3004 (a)(4)]

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27. THE OPERATOR SHALL KEEP RECORDS, IN A MANNER APPROVED BY THE AQMD, FOR THE FOLLOWING PARAMETER(S) OR ITEM(S):
TO PROVE COMPLIANCE WITH CONDITION 25.
[RULE 3004 (a)(4)]
28. THE OPERATOR SHALL USE THE DUST COLLECTOR IN SUCH A MANNER THAT THE DIFFERENTIAL PRESSURE ACROSS THE FILTER DOES NOT EXCEED 15 INCHES WATER COLUMN. THE OPERATOR SHALL DETERMINE AND RECORD THIS PARAMETER ONCE EVERY WEEK.
[RULE 3004 (a)(4)]

Emissions and Reporting:

1. THIS EQUIPMENT IS SUBJECT TO THE APPLICABLE REQUIREMENTS OF THE FOLLOWING RULES AND REGULATION:

PM: RULE 404, SEE APPENDIX B FOR EMISSION LIMITS
PM: RULE 405, SEE APPENDIX B FOR EMISSION LIMITS

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PERMIT TO OPERATE

**Permit No. F56312
A/N 406468**

Equipment Description:

RESOURCE RECOVERY SYSTEM NO. 2 CONSISTING OF:

1. REFUSE RECEIVING HOPPER, CHARGING MUNICIPAL SOLID WASTE FIRED BOILER NO. 2.
2. COMBUSTOR/BOILER NO. 2, MUNICIPAL SOLID WASTE FIRED, L.C. STEINMUELLER, WATER WALL TYPE, WITH RECIPROCATING GRATES, TWO NATURAL GAS FIRED AUXILIARY BURNERS WITH A COMBINED RATING OF 2,200,000 SCF/DAY, A MULTI-LEVEL AMMONIA INJECTION SYSTEM, UNDER GRATE PRIMARY COMBUSTION AIR FAN THAT VENTS THE WASTE RECEIVING AND STORAGE SYSTEM, AND OVER FIRE SECONDARY COMBUSTION AIR FAN.
3. CO BURNER, STEINMUELLER, MODEL NO. SSBG40, NATURAL GAS FIRED, 14.5 MM BTU PER HOUR.
4. BOILER SECTION, WATER TUBE TYPE, CONSISTING OF A SUPERHEATER, ECONOMIZER, TUBULAR STEAM COIL AIR PREHEATER, WITH MECHANICAL AND PNEUMATIC RAPPERS, AND EACH WITH A CAPACITY OF 130,000 POUNDS PER HOUR DAILY AVERAGE OF STEAM AT 660 PSIA AND 752 DEGREES FAHRENHEIT.
5. STEAM TURBINE, IMO DELAVAL, MODEL MJ-MZ-SF, (COMMON TO RESOURCE RECOVERY SYSTEMS NO. 1 AND 3).
6. GENERATOR, GEC ALSTHOM, MODEL T216-255, 37,504 KW (COMMON TO RESOURCE RECOVERY SYSTEMS NO. 1 AND 3).
7. AQUEOUS AMMONIA STORAGE TANK, 24,000 GALLON CAPACITY (COMMON TO RESOURCE RECOVERY SYSTEMS NO. 1 AND 3).

Conditions:

1. OPERATION OF THIS EQUIPMENT SHALL BE CONDUCTED IN COMPLIANCE WITH ALL DATA AND SPECIFICATIONS SUBMITTED WITH THE APPLICATION UNDER WHICH THIS PERMIT IS ISSUED UNLESS OTHERWISE NOTED BELOW.
[RULE 204]
2. THIS EQUIPMENT SHALL BE PROPERLY MAINTAINED AND KEPT IN GOOD OPERATING CONDITION AT ALL TIMES.
[RULE 204]

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3. THIS EQUIPMENT SHALL BE OPERATED BY PERSONNEL PROPERLY TRAINED IN ITS OPERATION. THIS FACILITY SHALL BE IN COMPLIANCE WITH THE APPLICABLE OPERATOR REQUIREMENTS AS SPECIFIED UNDER 40 CFR 60.54b.
[RULE 204; 40CFR 60 Subpart Cb]
4. THE COMBUSTOR/BOILER EQUIPMENT SHALL NOT BE OPERATED UNLESS IT IS VENTED ONLY TO AIR POLLUTION CONTROL EQUIPMENT WHICH IS IN FULL USE AND HAS BEEN ISSUED A VALID PERMIT BY THE AQMD.
[RULE 402; RULE 1303(a)(1)-BACT]
5. THE COMBUSTOR/BOILER EQUIPMENT SHALL NOT BE OPERATED UNLESS ALL OF ITS PRIMARY COMBUSTION AIR IS VENTED FROM THE TIPPING HALL AND THE REFUSE PIT OF THE REFUSE RECEIVING AND STORAGE SYSTEM.
[RULE 402]
6. THIS EQUIPMENT MAY ONLY BE USED TO BURN REFUSE COLLECTED FROM RESIDENTIAL SOURCES, COMMERCIAL SOURCES AND OTHER SOURCES AS APPROVED AND IN A MANNER PRESCRIBED IN WRITING BY THE AQMD. ANY MATERIAL SPECIFICALLY DESIGNATED AS HAZARDOUS MATERIAL OR HAZARDOUS WASTE SHALL NOT BE BURNED UNLESS OTHERWISE APPROVED AND IN A MANNER PRESCRIBED IN WRITING BY THE AQMD.
[RULE 204; RULE 1402; 40CFR 60 Subpart Cb]
7. ALL MATERIALS THAT ARE LISTED AS HAZARDOUS BY A FEDERAL OR STATE AGENCY OR APPEAR ON A FEDERAL OR STATE CANDIDATE LIST SHALL BE CONSIDERED "HAZARDOUS MATERIAL" FOR THE PURPOSE OF THIS PERMIT.
[RULE 204]
8. NATURAL GAS SHALL BE FIRED IN THIS COMBUSTOR ONLY FOR THE SUPPORT OF GOOD COMBUSTION OF REFUSE AND FOR PERIODS OF WARM-UP, START-UP AND SHUTDOWN. NATURAL GAS SHALL NOT BE USED FOR THE SOLE PURPOSE OF GENERATING POWER. DAILY NATURAL GAS CONSUMPTION SHALL BE MEASURED AND RECORDED.
[RULE 1303(a)(1)-BACT; RULE 1303(b)(2)-OFFSET]
9. DURING THE WARM-UP PERIOD, NATURAL GAS FIRING MAY CONTINUE UNTIL THE STEAM TURBINE REACHES FULL LOAD. FOR THE PURPOSE OF THIS PERMIT, A WARM-UP SHALL BE DEFINED AS THE PERIOD OF TIME FROM WHICH THE NATURAL GAS BURNER IS INITIALLY FIRED TO THE TIME REFUSE IS FIRST INTRODUCED INTO THE FURNACE.
[RULE 1303(a)(1)-BACT]
10. START-UP BEGINS WHEN THE FACILITY STARTS THE CONTINUOUS BURNING OF REFUSE AND DOES NOT INCLUDE ANY WARM UP PERIOD.
[40CFR 60 Subpart Eb]
11. SHUTDOWN BEGINS WHEN THE FACILITY CEASES REFUSE CHARGING TO THE COMBUSTOR, UNTIL COMPLETE REFUSE BURNOUT IS ACHIEVED. DURING SHUTDOWN, THE COMBUSTOR SHALL BURN NATURAL GAS UNTIL ALL REFUSE ON THE GRATES HAS BEEN COMBUSTED.
[RULE 1303(a)(1)-BACT; 40CFR 60 Subpart Eb]

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12. THE APPLICABLE STANDARDS OF PERFORMANCE UNDER 40CFR 60 SUBPARTS Cb AND Eb, SHALL APPLY AT ALL TIMES EXCEPT DURING PERIODS OF START-UP, SHUTDOWN, OR MALFUNCTION. THE DURATION OF START-UP, SHUTDOWN OR MALFUNCTION PERIODS SHALL COMPLY WITH 40CFR 60 SUBPART Eb SECTION 60.58b.
[40CFR 60 Subpart Cb; 40CFR 60 Subpart Eb]
13. THE COMBUSTOR/BOILER EQUIPMENT SHALL NOT BE OPERATED UNLESS THE SELECTIVE NON-CATALYTIC REDUCTION (SNCR) SYSTEM IS IN OPERATION, EXCEPT DURING THE PERIODS OF WARM-UP, SHUTDOWN OR WHEN THE FLUE GAS TEMPERATURE IS LESS THAN 1,200 DEGREES FAHRENHEIT.
[RULE 1303(a)(1)-BACT]
14. RESIDUE FROM THE GRATES, BOILER HOPPERS, AND SIFTINGS FROM UNDER THE GRATES SHALL BE DISCHARGED ONLY INTO AN ASH QUENCH TANK.
[RULE 402]
15. THE OWNER OR OPERATOR SHALL MAINTAIN AND OPERATE A CONTINUOUS LOAD MONITOR AND RECORDER IN A MANNER PRESCRIBED IN 40 CFR 60.58b, TO MEASURE AND RECORD STEAM FLOW OR FEEDWATER FLOW RATE TO DETERMINE THAT THE RESOURCE RECOVERY SYSTEM IS NOT OPERATING AT A LOAD LEVEL GREATER THAN 110 PERCENT OF THE MAXIMUM DEMONSTRATED MUNICIPAL WASTE COMBUSTOR UNIT LOAD AS DEFINED IN 40 CFR 60.51b EXCEPT AS SPECIFIED UNDER 40 CFR 60.53b(b). THE STEAM FLOW OR FEEDWATER FLOW SHALL BE CALCULATED IN 4-HOUR BLOCK ARITHMETIC AVERAGES.
[40CFR 60 Subpart Cb]
16. THE COMBUSTOR/BOILER SHALL BE OPERATED TO PROVIDE A MINIMUM GAS RETENTION TIME OF ONE SECOND AT A TEMPERATURE ABOVE 1,800 DEGREES FAHRENHEIT, AS SHOWN BY A MINIMUM ROOF TEMPERATURE READING OF 1,000 DEGREES FAHRENHEIT, EXCEPT DURING WARM-UP, START-UP AND SHUTDOWN.
[RULE 1303(a)(1)-BACT]
17. VISIBLE FUGITIVE ASH EMISSIONS FROM AN ASH CONVEYING SYSTEM SHALL NOT EXCEED 5 PERCENT OF THE OBSERVATION PERIOD WHICH IS DEFINED IN 40 CFR 60.58b(k), EXCEPT DURING MAINTENANCE AND REPAIR OF ASH CONVEYING SYSTEMS.
[RULE 402; 40CFR 60 Subpart Cb]
18. ALL RECORDS REQUIRED BY THIS PERMIT OR 40 CFR 60.59b, AS APPLICABLE, SHALL BE MAINTAINED AND KEPT ON FILE FOR A PERIOD OF AT LEAST FIVE YEARS AND SHALL BE MADE AVAILABLE TO AQMD PERSONNEL UPON REQUEST.
[RULE 204; 40CFR 60 Subpart Cb]
19. THE OWNER OR OPERATOR SHALL COMPLY WITH THE MUNICIPAL WASTE COMBUSTOR OPERATING PRACTICE REQUIREMENTS LISTED IN 40 CFR PART 60.53b (b) AND (c).
[40CFR 60 Subpart Cb]

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20. THE OWNER OR OPERATOR SHALL COMPLY WITH THE MUNICIPAL WASTE COMBUSTOR OPERATOR TRAINING AND CERTIFICATION REQUIREMENTS LISTED IN 40 CFR 60.54b (a) THROUGH (g).
[40CFR Subpart Cb]

Periodic Monitoring:

21. THE OPERATOR SHALL CONDUCT AN INSPECTION FOR VISIBLE EMISSIONS FROM ALL STACKS AND OTHER EMISSION POINTS OF THIS EQUIPMENT WHENEVER THERE IS A PUBLIC COMPLAINT OF VISIBLE EMISSIONS, WHENEVER VISIBLE EMISSIONS ARE OBSERVED, AND ON A SEMI-ANNUAL BASIS, AT LEAST, UNLESS THE EQUIPMENT DID NOT OPERATE DURING THE ENTIRE SEMI-ANNUAL PERIOD. THE ROUTINE SEMI-ANNUAL INSPECTION SHALL BE CONDUCTED WHILE THE EQUIPMENT IS IN OPERATION AND DURING DAYLIGHT HOURS. IF ANY VISIBLE EMISSIONS (NOT INCLUDING CONDENSED WATER VAPOR) ARE DETECTED THAT LAST MORE THAN THREE MINUTES IN ANY ONE-HOUR, THE OPERATOR SHALL EITHER:
- A. VERIFY AND CERTIFY WITHIN 24 HOURS THAT THE EQUIPMENT CAUSING THE EMISSION AND ANY ASSOCIATED AIR POLLUTION CONTROL EQUIPMENT ARE OPERATING NORMALLY ACCORDING TO THEIR DESIGN AND STANDARD PROCEDURES AND UNDER THE SAME CONDITIONS UNDER WHICH COMPLIANCE WAS ACHIEVED IN THE PAST;
 - B. TAKE CORRECTIVE ACTION(S) THAT ELIMINATES THE VISIBLE EMISSIONS WITHIN 24 HOURS AND REPORT THE VISIBLE EMISSIONS AS A POTENTIAL DEVIATION IN ACCORDANCE WITH THE REPORTING REQUIREMENTS IN SECTION K OF THIS PERMIT; OR
 - C. HAVE A CARB-CERTIFIED SMOKE READER DETERMINE COMPLIANCE WITH THE OPACITY STANDARD, USING EPA METHOD 9 OR THE PROCEDURES IN THE CARB MANUAL "VISIBLE EMISSION EVALUATION", WITHIN THREE BUSINESS DAYS AND REPORT ANY DEVIATIONS TO AQMD.

THE OPERATOR SHALL KEEP THE RECORDS IN ACCORDANCE WITH THE RECORDKEEPING REQUIREMENTS IN SECTION K OF THIS PERMIT AND THE FOLLOWING RECORDS:

- A. STACK OR EMISSION POINT IDENTIFICATION;
- B. DESCRIPTION OF ANY CORRECTIVE ACTIONS TAKEN TO ABATE VISIBLE EMISSIONS;
- C. DATE AND TIME VISIBLE EMISSION WAS ABATED; AND
- D. VISIBLE EMISSION OBSERVATION RECORDED BY A CERTIFIED SMOKE READER.
[RULE 3004 (a)(4)]

Emissions And Requirements:

22. THIS EQUIPMENT IS SUBJECT TO THE APPLICABLE REQUIREMENTS OF THE FOLLOWING RULES AND REGULATION:

PM: RULE 404, SEE APPENDIX B FOR EMISSION LIMITS
PM: RULE 405, SEE APPENDIX B FOR EMISSION LIMITS

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PM: 0.1 gr/scf, RULE 409
PM: 11 lb/hr AND 0.01 gr/scf, RULE 475
PM: 0.18 g/dscm, CORRECTED TO 12% CO₂, 40 CFR Subpart E
PM: 11 lb/hr AND 0.01 gr/scf, RULE 476
CO: 2000 PPMv, RULE 407
SOx: 500 PPMv, RULE 407
NOx: 225 PPMv, RULE 476

23. THE OPERATOR SHALL RECORD THE FOLLOWING PARAMETERS AND MAKE THEM AVAILABLE FOR SUBMITTAL TO THE ADMINISTRATOR OR ON-SITE REVIEW BY AN INSPECTOR:
- A) ALL 6-MINUTE AVERAGE OPACITY LEVELS AS SPECIFIED IN 60.58b(c).
 - B) ALL 1-HOUR AVERAGE SO_x EMISSION CONCENTRATIONS AS SPECIFIED UNDER 60.58b(e).
 - C) ALL 1-HOUR AVERAGE NO_x EMISSION CONCENTRATIONS AS SPECIFIED UNDER 60.58b(h).
 - D) ALL 1-HOUR AVERAGE CO EMISSION CONCENTRATIONS, MUNICIPAL WASTE COMBUSTOR UNIT LOAD MEASUREMENTS, AND PARTICULATE MATTER CONTROL DEVICE INLET TEMPERATURES AS SPECIFIED UNDER 60.58b(i).
- [40CFR 60 Subpart Eb, Section 60.59b]
24. THE OPERATOR SHALL COMPUTE AND RECORD THE FOLLOWING AVERAGES AND PERCENT REDUCTIONS AND MAKE THEM AVAILABLE FOR SUBMITTAL TO THE ADMINISTRATOR OR ON-SITE REVIEW BY AN INSPECTOR:
- A) ALL 24-HOUR DAILY GEOMETRIC AVERAGE SO_x EMISSION CONCENTRATIONS AND ALL 24-HOUR DAILY GEOMETRIC AVERAGE PERCENT REDUCTIONS IN SO_x EMISSIONS AS SPECIFIED IN 60.58b(e).
 - B) ALL 24-HOUR DAILY ARITHMETIC AVERAGE NO_x EMISSION CONCENTRATIONS AS SPECIFIED IN 60.58b(h).
 - C) ALL 4-HOUR BLOCK OR 24-HOUR DAILY ARITHMETIC AVERAGE CO EMISSION CONCENTRATIONS, AS APPLICABLE, AS SPECIFIED UNDER 60.58b(i).
 - D) ALL 4-HOUR BLOCK ARITHMETIC AVERAGE MUNICIPAL WASTE COMBUSTOR UNIT LOAD LEVELS AND PARTICULATE MATTER CONTROL DEVICE INLET TEMPERATURES AS SPECIFIED UNDER 60.58b(i).
- [40CFR 60 Subpart Eb, Section 60.59b]
25. THE OPERATOR SHALL IDENTIFY THE CALENDAR DATES WHEN ANY OF THE AVERAGE EMISSION CONCENTRATIONS, PERCENT REDUCTIONS, OR OPERATING PARAMETERS RECORDED UNDER (d)(2)(ii)(A) THROUGH (d)(2)(ii)(E) OR THE OPACITY LEVELS RECORDED UNDER (d)(2)(i)(A) OF SECTION 60.59b ARE ABOVE APPLICABLE LIMITS, WITH REASONS FOR SUCH EXCEEDENCES AND A DESCRIPTION OF CORRECTIVE ACTIONS TAKEN.
- [40CFR 60 Subpart Eb, Section 60.59b]

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26. THE OPERATOR SHALL IDENTIFY CALENDAR DATES FOR WHICH THE MINIMUM NUMBER OF HOURS OF ANY OF THE DATA SPECIFIED IN PARAGRAPHS SECTION 60.59b (d)(6)(i) THROUGH (d)(6)(v) HAVE NOT BEEN OBTAINED INCLUDING REASONS FOR NOT OBTAINING SUFFICIENT DATA AND A DESCRIPTION OF CORRECTIVE ACTIONS TAKEN.
[40CFR 60 Subpart Eb, Section 60.59b]
27. THE OPERATOR SHALL IDENTIFY EACH OCCURRENCE THAT SO_x AND NO_x EMISSIONS DATA OR OPERATIONAL DATA (CO EMISSIONS, UNIT LOAD, AND PARTICULATE MATTER CONTROL DEVICE TEMPERATURE) HAVE BEEN EXCLUDED FROM THE CALCULATION OF AVERAGE EMISSION CONCENTRATIONS OR PARAMETERS, AND THE REASONS FOR EXCLUDING THE DATA.
[40CFR 60 Subpart Eb, Section 60.59b]
28. THE OPERATOR SHALL RECORD THE RESULTS OF DAILY DRIFT TESTS AND QUARTERLY ACCURACY DETERMINATIONS FOR SO_x, NO_x AND CO CEMS AS REQUIRED BY APPENDIX F OF THIS SECTION 60.59b, PROCEDURE I.
[40CFR 60 Subpart Eb, Section 60.59b]
29. THE OPERATOR SHALL RECORD THE TEST REPORTS DOCUMENTING THE RESULTS OF THE INITIAL PERFORMANCE TEST AND ALL ANNUAL PERFORMANCE TESTS LISTED IN SECTION 60.59b (d)(9)(i) AND (d)(9)(ii) ALONG WITH SUPPORTING CALCULATIONS.
[40CFR 60 Subpart Eb, Section 60.59b]
30. THE OPERATOR SHALL RECORD THE FOLLOWING:
- A) RECORDS SHOWING THE NAMES OF THE MW COMBUSTOR CHIEF FACILITY OPERATOR, SHIFT SUPERVISORS, AND CONTROL ROOM OPERATORS WHO HAVE BEEN PROVISIONALLY CERTIFIED BY AN APPROVED CERTIFICATION PROGRAM AS REQUIRED BY 60.54b(a) INCLUDING DATES IF INITIAL AND RENEWAL CERTIFICATIONS.
 - B) RECORDS SHOWING THE NAMES OF THE MW COMBUSTOR CHIEF FACILITY OPERATOR, SHIFT SUPERVISORS, AND CONTROL ROOM OPERATORS WHO HAVE BEEN FULLY CERTIFIED BY AN APPROVED CERTIFICATION PROGRAM AS REQUIRED BY 60.54b(a) INCLUDING DATES IF INITIAL AND RENEWAL CERTIFICATIONS.
 - C) RECORDS SHOWING THE NAMES OF THE MW COMBUSTOR CHIEF FACILITY OPERATOR, SHIFT SUPERVISORS, AND CONTROL ROOM OPERATORS WHO HAVE COMPLETED THE EPA MW COMBUSTOR OPERATOR TRAINING OR APPROVED EQUIVALENT COURSE AS REQUIRED BY 60.54b(d) INCLUDING DOCUMENTATION OF TRAINING COMPLETION.
- [40CFR 60 Subpart Eb, Section 60.59b]
31. THE OPERATOR SHALL RECORD THE NAMES OF PERSONS THAT HAVE COMPLETED A REVIEW OF THE OPERATIONS MANUAL AS REQUIRED BY 60.54b(f).
[40CFR 60 Subpart Eb, Section 60.59b]

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32. CONTROLLED EMISSIONS OF OXIDES OF SULFUR (SOX) FROM THE COMBUSTOR/BOILER SHALL NOT EXCEED THE MORE STRINGENT OF 17 LB/HR OR 70 PPM, DRY CORRECTED TO 12% CO₂ (3 HOUR AVERAGE), AND THE MORE STRINGENT OF 12 LB/HR OR 26 PPM, DRY CORRECTED TO 12 % CO₂ (8 HOUR AVERAGE).

[RULE 1703 – PSD Analysis]

[40CFR – 52-21 PSD]

33. CONTROLLED EMISSIONS OF THE FOLLOWING POLLUTANTS IN THE EXHAUST FROM THE SYSTEM SHALL NOT EXCEED THE LIMITS SPECIFIED BELOW:

LEAD

0.08 LBS/HR (3-HOUR AVERAGE)

MERCURY

0.12 LBS/HR ((3-HOUR AVERAGE)

FLUORIDES (AS HYDROGEN FLUORIDE)

1.1 LBS/HR (3-HOUR AVERAGE)

[RULE 1703 – PSD Analysis]

[40CFR – 52-21 PSD]

FACILITY PERMIT TO OPERATE LONG BEACH CITY, SERRF PROJECT

PERMIT TO OPERATE

**Permit No. R-D87609
A/N 274883**

Equipment Description:

AIR POLLUTION CONTROL SYSTEM NO. 2 CONSISTING OF:

1. ROTARY ATOMIZER NO. 2 WITH CYCLONE INLETS VENTING COMBUSTOR/BOILER NO. 2.
2. SPRAY REACTOR TYPE REACTORS WITH CALCIUM HYDROXIDE INJECTION, EACH SERVING ROTARY ATOMIZER NO. 2.
3. BAGHOUSE NO. 2, WITH TEN COMPARTMENTS, REVERSE AIR CLEANING, 73,416 SQ. FT. OF FILTER AREA.
4. INDUCED DRAFT FAN NO. 2 VENTING RESOURCE RECOVERY SYSTEM NO. 2.

Conditions:

1. OPERATION OF THIS EQUIPMENT SHALL BE CONDUCTED IN COMPLIANCE WITH ALL DATA AND SPECIFICATIONS SUBMITTED WITH THE APPLICATION UNDER WHICH THIS PERMIT IS ISSUED UNLESS OTHERWISE NOTED BELOW.
[RULE 204]
2. THIS EQUIPMENT SHALL BE PROPERLY MAINTAINED AND KEPT IN GOOD OPERATING CONDITION AT ALL TIMES.
[RULE 204]
3. THE OWNER OR OPERATOR SHALL COMPLY WITH THE MUNICIPAL WASTE COMBUSTOR OPERATING PRACTICE REQUIREMENTS LISTED IN 40 CFR 60.53b (b) AND (c).
[40CFR 60 Subpart Cb]
4. THE OWNER OR OPERATOR SHALL COMPLY WITH THE MUNICIPAL WASTE COMBUSTOR OPERATOR TRAINING AND CERTIFICATION REQUIREMENTS LISTED IN 40 CFR 60.54b (a) THROUGH (g).
[40CFR Subpart Cb]
5. DUST OR FLYASH COLLECTED IN THE BAGHOUSE COMPARTMENT HOPPERS SHALL BE DISCHARGED ONLY INTO CLOSED CONVEYORS AND SHALL REMAIN IN CLOSED CONVEYORS, EXCEPT DURING MAINTENANCE AND REPAIR, DUST OR FLYASH COLLECTED IN THE SPRAY REACTOR SHALL BE REMOVED IN AN ENCLOSED SYSTEM.
[RULE 402; RULE 1303(a)(1)-BACT]

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6. A GAUGE SHALL BE MAINTAINED TO INDICATE, IN INCHES OF WATER PRESSURE, THE STATIC PRESSURE DIFFERENTIAL ACROSS THE BAGS.
[RULE 1303(a)(1)-BACT]
7. THE VOLUME OF LIME SLURRY SUPPLIED TO THE ATOMIZERS FOR SO₂ CONTROL SHALL BE CONTINUOUSLY MEASURED AND RECORDED.
[RULE 1303(a)(1)-BACT]
8. A CONTINUOUS MONITORING SYSTEM TO MONITOR AND RECORD MASS EMISSIONS AND CONCENTRATIONS OF NITROGEN OXIDES (NO_x), OXIDES OF SULFUR (SO_x) AND CARBON MONOXIDE (CO) IN THE EXHAUST OF THE COMBUSTOR/BOILER STACK, SHALL BE MAINTAINED AND OPERATED IN A MANNER PRESCRIBED IN 40 CFR 60.58b.
[RULE 476; 40CFR 60 Subpart Cb]
9. A CONTINUOUS OXYGEN MONITOR AND RECORDER, AS APPROVED BY THE AQMD, SHALL BE MAINTAINED AND OPERATED IN A MANNER PRESCRIBED IN 40 CFR 60.58b TO MEASURE CONCENTRATIONS OF OXYGEN IN THE EXHAUST OF THE COMBUSTOR/BOILER STACK.
[40CFR 60 Subpart Cb]
10. A SYSTEM, AS APPROVED BY THE AQMD, SHALL BE OPERATED TO CONVERT AND RECORD THE STACK NITROGEN OXIDES CONCENTRATIONS TO 3% OXYGEN ON A DRY BASIS AND REPORT THE RESULTS IN A MANNER WHICH DEMONSTRATES COMPLIANCE WITH RULE 476.
[RULE 476]
11. THE OWNER OR OPERATOR SHALL MAINTAIN AND OPERATE A CONTINUOUS OPACITY MONITOR AND RECORDER IN A MANNER PRESCRIBED IN 40 CFR 60.58b TO MEASURE OPACITY OF FLUE GAS IN THE EXHAUST OF THE COMBUSTOR/BOILER STACK. THE MEASURED OPACITY SHALL NOT EXCEED 10 PERCENT IN 6-MINUTE AVERAGE.
[40CFR 60 Subpart Cb]
12. THE OWNER OR OPERATOR SHALL MAINTAIN AND OPERATE A CONTINUOUS TEMPERATURE MONITOR IN A MANNER PRESCRIBED IN 40 CFR 60.58b TO MONITOR THE TEMPERATURE OF THE FLUE GAS STREAM AT THE INLET TO EACH PARTICULATE MATTER CONTROL DEVICE FOR THE RESOURCE RECOVERY SYSTEM. THE MONITORED TEMPERATURE SHALL NOT EXCEED 17 DEGREES IN CELSIUS (4-HR BLOCK AVERAGE) ABOVE THE MAXIMUM DEMONSTRATED PARTICULATE MATTER CONTROL DEVICE TEMPERATURE AS DEFINED IN 40 CFR 60.51b EXCEPT AS SPECIFIED UNDER 40 CFR 60.53b(c).
[40CFR 60 Subpart Cb]
13. ALL CONTINUOUS EMISSION MONITORS SHALL BE OPERATED IN ACCORDANCE WITH THE REQUIREMENTS AND OPERATING PROCEDURES AS APPROVED BY THE AQMD.
[40CFR 60-Subpart Cb]
14. CONTROLLED EMISSIONS OF OXIDES OF NITROGEN (NO_x) IN THE AIR POLLUTION CONTROL SYSTEM EXHAUST FROM THIS SYSTEM SHALL NOT EXCEED 225 PPM (15 MINUTES AVERAGE) AT 3% OXYGEN ON A DRY BASIS.
[RULE 476; RULE 1303(b)(2)-OFFSET]

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15. CONTROLLED NOX EMISSIONS IN THE EXHAUST FROM THE SYSTEM SHALL NOT EXCEED 205 PPMV CORRECTED TO 7% OXYGEN ON A DRY BASIS. WHEN AVERAGING EMISSIONS FROM ALL COMBUSTORS AS ALLOWED IN PART 60.33b(d) OF 40 CFR SUBPART Cb, THE AVERAGED NOX EMISSIONS SHALL NOT EXCEED 180 PPMV CORRECTED TO 7% OXYGEN ON A DRY BASIS (24-HR DAILY ARITHMETIC AVERAGE).
 [40CFR 60 Subpart Cb]

16. CONTROLLED EMISSIONS OF OXIDES OF SULFUR (SO_x) FROM THE COMBUSTOR/BOILER SHALL NOT EXCEED THE MORE STRINGENT OF 17 LB/HR OR 70 PPM, DRY CORRECTED TO 12% CO₂ (3 HOUR AVERAGE), AND THE MORE STRINGENT OF 12 LB/HR OR 26 PPM, DRY CORRECTED TO 12 % CO₂ (8 HOUR AVERAGE).
 [RULE 1303(b)(2)-OFFSET]

17. CONTROLLED EMISSIONS OF THE FOLLOWING POLLUTANTS IN THE EXHAUST FROM THE SYSTEM SHALL NOT EXCEED THE LIMITS SPECIFIED BELOW. THE FOLLOWING LIMITS ARE CORRECTED TO 7% OXYGEN ON A DRY BASIS UNLESS OTHERWISE INDICATED:

OXIDES OF SULFUR (SOX)	29 PPMV OR 75% WT. REDUCTION (24-HR DAILY GEOMETRIC MEAN)
PARTICULATE MATTERS (PM)	27 mg/DSCM
DIOXIN/FURAN	30 ng/DSCM
CADMIUM	0.04 mg/DSCM
LEAD	0.44 mg/DSCM
MERCURY	0.080 mg/DSCM OR 85% WT. REDUCTION
HYDROGEN CHLORIDE	29 PPMV OR 95% WT. REDUCTION
FLUORIDE (AS HF)	1.1 LBS/HOUR

 [40CFR 60 Subpart Cb]

18. CONTROLLED EMISSIONS OF CARBON MONOXIDE (CO) IN THE EXHAUST FROM THE SYSTEM SHALL NOT EXCEED 100 PPMV (4-HR ARITHMETIC AVERAGE) CORRECTED TO 7% OXYGEN ON A DRY BASIS.
 [40CFR 60 Subpart Cb]

19. THE CONTROLLED EMISSIONS IN THE EXHAUST FROM THIS SYSTEM SHALL NOT EXCEED THE FOLLOWING LIMITS:

<u>CONTAMINANT</u>	<u>LB/DAY</u>
NITROGEN OXIDES	816
PM10	120
SULFUR OXIDES	288
CARBON MONOXIDE	792
REACTIVE ORGANIC GAS	72
HYDROGEN CHLORIDE	204

 [RULE 1303(b)(2)-OFFSET]

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20. VISIBLE FUGITIVE ASH EMISSIONS FROM AN ASH CONVEYING SYSTEM SHALL NOT EXCEED 5 PERCENT OF THE OBSERVATION PERIOD WHICH IS DEFINED IN 40 CFR 60.58b(k), EXCEPT DURING MAINTENANCE AND REPAIR OF ASH CONVEYING SYSTEMS.
[40CFR 60 Subpart Cb]
21. THE AQMD APPROVED SAMPLING PORTS SHALL BE MAINTAINED IN THE FOLLOWING LOCATIONS:
- A. IN THE DUCT FOLLOWING THE COMBUSTOR/BOILER BUT PRECEDING THE SPRAY REACTOR;
 - B. IN THE DUCT FOLLOWING THE SPRAY REACTOR BUT PRECEDING THE BAGHOUSE;
 - C. IN THE EXHAUST STACK;
 - D. IN THE COMBUSTION AIR INLET DUCT BETWEEN THE INTAKE AND THE COMBUSTOR.
[RULE 204]
22. THE OWNER OR OPERATOR OF SOUTHEAST RESOURCE RECOVERY FACILITY (SERRF) SHALL CONDUCT PERFORMANCE TESTS ON AN ANNUAL BASIS IN ACCORDANCE WITH THE AQMD TEST PROCEDURES AND 40 CFR 60.58b. WRITTEN NOTICE OF SUCH PERFORMANCE TESTS SHALL BE PROVIDED TO THE AQMD SEVEN (7) DAYS PRIOR TO THE TEST SO THAT AN OBSERVER MAY BE PRESENT.

THE PERFORMANCE TESTS SHALL INCLUDE, BUT MAY NOT BE LIMITED TO, A TEST OF ONE OF THE THREE COMBUSTOR/BOILER EXHAUST STREAMS FOLLOWING THE BAGHOUSE UNLESS OTHERWISE REQUESTED BELOW FOR THE FOLLOWING POLLUTANTS:

- A. HYDROCARBONS
- B. PARTICULATE MATTER
- C. HYDROGEN CHLORIDE
- D. EXHAUST FLOW RATE, WET AND DRY
- E. POLYNUCLEAR AROMATIC HYDROCARBONS (BENZO-A-PYRENE, BENZO-E-PYRENE, BENZO-A-ANTHRACENE AND CORONENE).
- F. TETRA- THROUGH OCTA-CHLORINATED DIBENZO-P-DIOXINS AND DIBENZOFURANS
- G. HEAVY METALS (ARSENIC, BERYLLIUM, CADMIUM, CHROMIUM, COPPER, LEAD, MERCURY, NICKEL, AND ZINC)
- H. OPACITY
- I. FLUE GAS TEMPERATURE AT THE INLET TO THE BAGHOUSE DURING DIOXIN/FURAN TEST
- J. LOAD LEVEL (STEAM FLOW OR FEEDWATER FLOW) DURING DIOXIN/FURAN TEST
- K. OXIDES OF NITROGEN (NOX)
- L. OXIDES OF SULFUR (SOX)
- M. CARBON MONOXIDE
- N. FUGITIVE ASH USING EPA METHOD 22

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IF THE PERFORMANCE TESTS OF ALL THREE COMBUSTION UNITS DEMONSTRATE THAT DIOXIN/FURAN EMISSIONS ARE LESS THAN OR EQUAL TO 7 ng/DSCM (TOTAL MASS) FOR A 2-YEAR PERIOD, THE OWNER OR OPERATOR MAY ELECT TO CONDUCT ANNUAL PERFORMANCE TEST ON ONLY ONE OF THE THREE UNITS. UNDER THIS ALTERNATIVE TESTING SCHEDULE, A DIFFERENT UNIT SHALL BE TESTED IN SEQUENCE EACH YEAR. IF ANY ANNUAL TEST INDICATES DIOXIN/FURAN EMISSIONS EXCEED 7 ng/DSCM (TOTAL MASS), PERFORMANCE TESTS SHALL BE CONDUCTED ON ALL THREE COMBUSTION UNITS UNTIL SERRF CAN QUALIFY FOR THE ALTERNATIVE TESTING SCHEDULE.

[RULE 1303(a)(1)-BACT; 40CFR 60 Subpart Cb]

23. THE OWNER OR OPERATOR OF SERRF SHALL SUBMIT WRITTEN RESULTS OF THE PERFORMANCE TESTS TO THE AQMD BY FEBRUARY 1ST OF EACH YEAR FOLLOWING THE CALENDAR YEAR IN WHICH THE TESTS WERE CONDUCTED. THE OWNER OR OPERATOR OF SERRF SHALL ALSO COMPLY WITH THE REPORTING AND RECORDKEEPING REQUIREMENTS SPECIFIED IN 40 CFR 60.59b, AS APPLICABLE.

[RULE 1303(a)(1)-BACT; 40CFR 60 Subpart Cb]

24. ALL RECORDS REQUIRED BY THIS PERMIT OR 40 CFR 60.59b, AS APPLICABLE, SHALL BE MAINTAINED AND KEPT ON FILE FOR A PERIOD OF AT LEAST FIVE YEARS AND BE MADE AVAILABLE TO AQMD PERSONNEL UPON REQUEST.

[RULE 204; 40CFR 60 Subpart Cb]

Periodic Monitoring :

25. THE OPERATOR SHALL USE THIS EQUIPMENT IN SUCH A MANNER THAT THE DIFFERENTIAL PRESSURE ACROSS THE FILTER DOES NOT EXCEED 15 INCHES WATER COLUMN. THE OPERATOR SHALL DETERMINE AND RECORD THE PARAMETER BEING MONITORED ONCE EVERY WEEK.

[RULE 3004 (a)(4)]

26. THE OPERATOR SHALL PERFORM A BIENNIAL INSPECTION OF THE EQUIPMENT AND BAGS FOR LEAKS, BROKEN OR TORN BAGS AND IMPROPERLY INSTALLED BAGS. ADDITIONAL INSPECTION SHALL BE CONDUCTED WHEN THE STACK OPACITY AS MEASURED BY THE CONTINUOUS OPACITY MONITORING SYSTEM EXCEEDS 5% FOR ONE HOUR OR MORE. THE OPERATOR SHALL KEEP RECORDS, IN A MANNER APPROVED BY THE DISTRICT, FOR THE FOLLOWING PARAMETER(S) OR ITEM(S):

- A. THE NAME OF THE PERSON PERFORMING THE INSPECTION AND/OR MAINTENANCE OF THE BAGS;
- B. THE DATE, TIME AND RESULTS OF THE INSPECTION; AND THE DATE, TIME AND DESCRIPTION OF ANY MAINTENANCE OR REPAIRS RESULTING FROM THE INSPECTION.

[RULE 3004 (a)(4)]

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27. THE OPERATOR SHALL KEEP RECORDS, IN A MANNER APPROVED BY THE AQMD, FOR THE FOLLOWING PARAMETER(S) OR ITEM(S):
TO PROVE COMPLIANCE WITH CONDITION 25.
[RULE 3004 (a)(4)]
28. THE OPERATOR SHALL USE THE DUST COLLECTOR IN SUCH A MANNER THAT THE DIFFERENTIAL PRESSURE ACROSS THE FILTER DOES NOT EXCEED 15 INCHES WATER COLUMN. THE OPERATOR SHALL DETERMINE AND RECORD THIS PARAMETER ONCE EVERY WEEK.
[RULE 3004 (a)(4)]

Emissions and Reporting:

1. THIS EQUIPMENT IS SUBJECT TO THE APPLICABLE REQUIREMENTS OF THE FOLLOWING RULES AND REGULATION:

PM: RULE 404, SEE APPENDIX B FOR EMISSION LIMITS
PM: RULE 405, SEE APPENDIX B FOR EMISSION LIMITS

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PERMIT TO OPERATE

**Permit No. F56313
A/N 406470**

Equipment Description:

RESOURCE RECOVERY SYSTEM NO. 3 CONSISTING OF:

1. REFUSE RECEIVING HOPPER, CHARGING MUNICIPAL SOLID WASTE FIRED BOILER NO. 3.
2. COMBUSTOR/BOILER NO. 3, MUNICIPAL SOLID WASTE FIRED, L.C. STEINMUEULLER, WATER WALL TYPE, WITH RECIPROCATING GRATES, TWO NATURAL GAS FIRED AUXILIARY BURNERS WITH A COMBINED RATING OF 2,200,000 SCF/DAY, A MULTI-LEVEL AMMONIA INJECTION SYSTEM, UNDER GRATE PRIMARY COMBUSTION AIR FAN THAT VENTS THE WASTE RECEIVING AND STORAGE SYSTEM, AND OVER FIRE SECONDARY COMBUSTION AIR FAN.
3. CO BURNER, STEINMUELLER, MODEL NO. SSBG40, NATURAL GAS FIRED, 14.5 MM BTU PER HOUR.
4. BOILER SECTION, WATER TUBE TYPE, CONSISTING OF A SUPERHEATER, ECONOMIZER, TUBULAR STEAM COIL AIR PREHEATER, WITH MECHANICAL AND PNEUMATIC RAPPERS, AND EACH WITH A CAPACITY OF 130,000 POUNDS PER HOUR DAILY AVERAGE OF STEAM AT 660 PSIA AND 752 DEGREES FAHRENHEIT.
5. STEAM TURBINE, IMO DELAVAL, MODEL MJ-MZ-SF (COMMON TO RESOURCE RECOVERY SYSTEMS NO. 1 AND 2).
6. GENERATOR, GEC ALSTHOM, MODEL T216-255, 37,504 KW (COMMON TO RESOURCE RECOVERY SYSTEMS NO. 1 AND 2).
7. AQUEOUS AMMONIA STORAGE TANK, 24,000 GALLON CAPACITY (COMMON TO RESOURCE RECOVERY SYSTEMS NO. 1 AND 2).

Conditions:

1. OPERATION OF THIS EQUIPMENT SHALL BE CONDUCTED IN COMPLIANCE WITH ALL DATA AND SPECIFICATIONS SUBMITTED WITH THE APPLICATION UNDER WHICH THIS PERMIT IS ISSUED UNLESS OTHERWISE NOTED BELOW.
[RULE 204]
2. THIS EQUIPMENT SHALL BE PROPERLY MAINTAINED AND KEPT IN GOOD OPERATING CONDITION AT ALL TIMES.
[RULE 204]

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3. THIS EQUIPMENT SHALL BE OPERATED BY PERSONNEL PROPERLY TRAINED IN ITS OPERATION. THIS FACILITY SHALL BE IN COMPLIANCE WITH THE APPLICABLE OPERATOR REQUIREMENTS AS SPECIFIED UNDER 40 CFR 60.54b.
[RULE 204; 40CFR 60 Subpart Cb]
4. THE COMBUSTOR/BOILER EQUIPMENT SHALL NOT BE OPERATED UNLESS IT IS VENTED ONLY TO AIR POLLUTION CONTROL EQUIPMENT WHICH IS IN FULL USE AND HAS BEEN ISSUED A VALID PERMIT BY THE AQMD.
[RULE 402; RULE 1303(a)(1)-BACT]
5. THE COMBUSTOR/BOILER EQUIPMENT SHALL NOT BE OPERATED UNLESS ALL OF ITS PRIMARY COMBUSTION AIR IS VENTED FROM THE TIPPING HALL AND THE REFUSE PIT OF THE REFUSE RECEIVING AND STORAGE SYSTEM.
[RULE 402]
6. THIS EQUIPMENT MAY ONLY BE USED TO BURN REFUSE COLLECTED FROM RESIDENTIAL SOURCES, COMMERCIAL SOURCES AND OTHER SOURCES AS APPROVED AND IN A MANNER PRESCRIBED IN WRITING BY THE AQMD. ANY MATERIAL SPECIFICALLY DESIGNATED AS HAZARDOUS MATERIAL OR HAZARDOUS WASTE SHALL NOT BE BURNED UNLESS OTHERWISE APPROVED AND IN A MANNER PRESCRIBED IN WRITING BY THE AQMD.
[RULE 204; RULE 1402; 40CFR 60 Subpart Cb]
7. ALL MATERIALS THAT ARE LISTED AS HAZARDOUS BY A FEDERAL OR STATE AGENCY OR APPEAR ON A FEDERAL OR STATE CANDIDATE LIST SHALL BE CONSIDERED "HAZARDOUS MATERIAL" FOR THE PURPOSE OF THIS PERMIT.
[RULE 204]
8. NATURAL GAS SHALL BE FIRED IN THIS COMBUSTOR ONLY FOR THE SUPPORT OF GOOD COMBUSTION OF REFUSE AND FOR PERIODS OF WARM-UP, START-UP AND SHUTDOWN. NATURAL GAS SHALL NOT BE USED FOR THE SOLE PURPOSE OF GENERATING POWER. DAILY NATURAL GAS CONSUMPTION SHALL BE MEASURED AND RECORDED.
[RULE 1303(a)(1)-BACT; RULE 1303(b)(2)-OFFSET]
9. DURING THE WARM-UP PERIOD, NATURAL GAS FIRING MAY CONTINUE UNTIL THE STEAM TURBINE REACHES FULL LOAD. FOR THE PURPOSE OF THIS PERMIT, A WARM-UP SHALL BE DEFINED AS THE PERIOD OF TIME FROM WHICH THE NATURAL GAS BURNER IS INITIALLY FIRED TO THE TIME REFUSE IS FIRST INTRODUCED INTO THE FURNACE.
[RULE 1303(a)(1)-BACT]
10. START-UP BEGINS WHEN THE FACILITY STARTS THE CONTINUOUS BURNING OF REFUSE AND DOES NOT INCLUDE ANY WARM UP PERIOD.
[40CFR 60 Subpart Eb]
11. SHUTDOWN BEGINS WHEN THE FACILITY CEASES REFUSE CHARGING TO THE COMBUSTOR, UNTIL COMPLETE REFUSE BURNOUT IS ACHIEVED. DURING SHUTDOWN, THE COMBUSTOR SHALL BURN NATURAL GAS UNTIL ALL REFUSE ON THE GRATES HAS BEEN COMBUSTED.
[RULE 1303(a)(1)-BACT; 40CFR 60 Subpart Eb]

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12. THE APPLICABLE STANDARDS OF PERFORMANCE UNDER 40CFR 60 SUBPARTS Cb AND Eb, SHALL APPLY AT ALL TIMES EXCEPT DURING PERIODS OF START-UP, SHUTDOWN, OR MALFUNCTION. THE DURATION OF START-UP, SHUTDOWN OR MALFUNCTION PERIODS SHALL COMPLY WITH 40CFR 60 SUBPART Eb SECTION 60.58b.
[40CFR 60 Subpart Cb; 40CFR 60 Subpart Eb]
13. THE COMBUSTOR/BOILER EQUIPMENT SHALL NOT BE OPERATED UNLESS THE SELECTIVE NON-CATALYTIC REDUCTION (SNCR) SYSTEM IS IN OPERATION, EXCEPT DURING THE PERIODS OF WARM-UP, SHUTDOWN OR WHEN THE FLUE GAS TEMPERATURE IS LESS THAN 1,200 DEGREES FAHRENHEIT.
[RULE 1303(a)(1)-BACT]
14. RESIDUE FROM THE GRATES, BOILER HOPPERS, AND SIFTINGS FROM UNDER THE GRATES SHALL BE DISCHARGED ONLY INTO AN ASH QUENCH TANK.
[RULE 402]
15. THE OWNER OR OPERATOR SHALL MAINTAIN AND OPERATE A CONTINUOUS LOAD MONITOR AND RECORDER IN A MANNER PRESCRIBED IN 40 CFR 60.58b, TO MEASURE AND RECORD STEAM FLOW OR FEEDWATER FLOW RATE TO DETERMINE THAT THE RESOURCE RECOVERY SYSTEM IS NOT OPERATING AT A LOAD LEVEL GREATER THAN 110 PERCENT OF THE MAXIMUM DEMONSTRATED MUNICIPAL WASTE COMBUSTOR UNIT LOAD AS DEFINED IN 40 CFR 60.51b EXCEPT AS SPECIFIED UNDER 40 CFR 60.53b(b). THE STEAM FLOW OR FEEDWATER FLOW SHALL BE CALCULATED IN 4-HOUR BLOCK ARITHMETIC AVERAGES.
[40CFR 60 Subpart Cb]
16. THE COMBUSTOR/BOILER SHALL BE OPERATED TO PROVIDE A MINIMUM GAS RETENTION TIME OF ONE SECOND AT A TEMPERATURE ABOVE 1,800 DEGREES FAHRENHEIT, AS SHOWN BY A MINIMUM ROOF TEMPERATURE READING OF 1,000 DEGREES FAHRENHEIT, EXCEPT DURING WARM-UP, START-UP AND SHUTDOWN.
[RULE 1303(a)(1)-BACT]
17. VISIBLE FUGITIVE ASH EMISSIONS FROM AN ASH CONVEYING SYSTEM SHALL NOT EXCEED 5 PERCENT OF THE OBSERVATION PERIOD WHICH IS DEFINED IN 40 CFR 60.58b(k), EXCEPT DURING MAINTENANCE AND REPAIR OF ASH CONVEYING SYSTEMS.
[RULE 402; 40CFR 60 Subpart Cb]
18. ALL RECORDS REQUIRED BY THIS PERMIT OR 40 CFR 60.59b, AS APPLICABLE, SHALL BE MAINTAINED AND KEPT ON FILE FOR A PERIOD OF AT LEAST FIVE YEARS AND SHALL BE MADE AVAILABLE TO AQMD PERSONNEL UPON REQUEST.
[RULE 204; 40CFR 60 Subpart Cb]
19. THE OWNER OR OPERATOR SHALL COMPLY WITH THE MUNICIPAL WASTE COMBUSTOR OPERATING PRACTICE REQUIREMENTS LISTED IN 40 CFR PART 60.53b (b) AND (c).
[40CFR 60 Subpart Cb]

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20. THE OWNER OR OPERATOR SHALL COMPLY WITH THE MUNICIPAL WASTE COMBUSTOR OPERATOR TRAINING AND CERTIFICATION REQUIREMENTS LISTED IN 40 CFR 60.54b (a) THROUGH (g).
[40CFR Subpart Cb]

Periodic Monitoring:

22. THE OPERATOR SHALL CONDUCT AN INSPECTION FOR VISIBLE EMISSIONS FROM ALL STACKS AND OTHER EMISSION POINTS OF THIS EQUIPMENT WHENEVER THERE IS A PUBLIC COMPLAINT OF VISIBLE EMISSIONS, WHENEVER VISIBLE EMISSIONS ARE OBSERVED, AND ON A SEMI-ANNUAL BASIS, AT LEAST, UNLESS THE EQUIPMENT DID NOT OPERATE DURING THE ENTIRE SEMI-ANNUAL PERIOD. THE ROUTINE SEMI-ANNUAL INSPECTION SHALL BE CONDUCTED WHILE THE EQUIPMENT IS IN OPERATION AND DURING DAYLIGHT HOURS. IF ANY VISIBLE EMISSIONS (NOT INCLUDING CONDENSED WATER VAPOR) ARE DETECTED THAT LAST MORE THAN THREE MINUTES IN ANY ONE-HOUR, THE OPERATOR SHALL EITHER:
- A. VERIFY AND CERTIFY WITHIN 24 HOURS THAT THE EQUIPMENT CAUSING THE EMISSION AND ANY ASSOCIATED AIR POLLUTION CONTROL EQUIPMENT ARE OPERATING NORMALLY ACCORDING TO THEIR DESIGN AND STANDARD PROCEDURES AND UNDER THE SAME CONDITIONS UNDER WHICH COMPLIANCE WAS ACHIEVED IN THE PAST;
 - B. TAKE CORRECTIVE ACTION(S) THAT ELIMINATES THE VISIBLE EMISSIONS WITHIN 24 HOURS AND REPORT THE VISIBLE EMISSIONS AS A POTENTIAL DEVIATION IN ACCORDANCE WITH THE REPORTING REQUIREMENTS IN SECTION K OF THIS PERMIT; OR
 - C. HAVE A CARB-CERTIFIED SMOKE READER DETERMINE COMPLIANCE WITH THE OPACITY STANDARD, USING EPA METHOD 9 OR THE PROCEDURES IN THE CARB MANUAL "VISIBLE EMISSION EVALUATION", WITHIN THREE BUSINESS DAYS AND REPORT ANY DEVIATIONS TO AQMD.

THE OPERATOR SHALL KEEP THE RECORDS IN ACCORDANCE WITH THE RECORDKEEPING REQUIREMENTS IN SECTION K OF THIS PERMIT AND THE FOLLOWING RECORDS:

- A. STACK OR EMISSION POINT IDENTIFICATION;
- B. DESCRIPTION OF ANY CORRECTIVE ACTIONS TAKEN TO ABATE VISIBLE EMISSIONS;
- C. DATE AND TIME VISIBLE EMISSION WAS ABATED; AND
- D. VISIBLE EMISSION OBSERVATION RECORDED BY A CERTIFIED SMOKE READER.
[RULE 3004 (a)(4)]

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Emissions And Requirements:

22. THIS EQUIPMENT IS SUBJECT TO THE APPLICABLE REQUIREMENTS OF THE FOLLOWING RULES AND REGULATION:

PM: RULE 404, SEE APPENDIX B FOR EMISSION LIMITS
PM: RULE 405, SEE APPENDIX B FOR EMISSION LIMITS
PM: 0.1 gr/scf, RULE 409
PM: 11 lb/hr AND 0.01 gr/scf, RULE 475
PM: 11 lb/hr AND 0.01 gr/scf, RULE 476
PM: 0.18 g/dscm, CORRECTED TO 12% CO₂, 40 CFR Subpart E
CO: 2000 PPMv, RULE 407
SOx: 500 PPMv, RULE 407
NOx: 225 PPMv, RULE 476

23. THE OPERATOR SHALL RECORD THE FOLLOWING PARAMETERS AND MAKE THEM AVAILABLE FOR SUBMITTAL TO THE ADMINISTRATOR OR ON-SITE REVIEW BY AN INSPECTOR:

- A) ALL 6-MINUTE AVERAGE OPACITY LEVELS AS SPECIFIED IN 60.58b(c).
- B) ALL 1-HOUR AVERAGE SO_x EMISSION CONCENTRATIONS AS SPECIFIED UNDER 60.58b(e).
- C) ALL 1-HOUR AVERAGE NO_x EMISSION CONCENTRATIONS AS SPECIFIED UNDER 60.58b(h).
- D) ALL 1-HOUR AVERAGE CO EMISSION CONCENTRATIONS, MUNICIPAL WASTE COMBUSTOR UNIT LOAD MEASUREMENTS, AND PARTICULATE MATTER CONTROL DEVICE INLET TEMPERATURES AS SPECIFIED UNDER 60.58b(i).

[40CFR 60 Subpart Eb, Section 60.59b]

24. THE OPERATOR SHALL COMPUTE AND RECORD THE FOLLOWING AVERAGES AND PERCENT REDUCTIONS AND MAKE THEM AVAILABLE FOR SUBMITTAL TO THE ADMINISTRATOR OR ON-SITE REVIEW BY AN INSPECTOR:

- A) ALL 24-HOUR DAILY GEOMETRIC AVERAGE SO_x EMISSION CONCENTRATIONS AND ALL 24-HOUR DAILY GEOMETRIC AVERAGE PERCENT REDUCTIONS IN SO_x EMISSIONS AS SPECIFIED IN 60.58b(e).
- B) ALL 24-HOUR DAILY ARITHMETIC AVERAGE NO_x EMISSION CONCENTRATIONS AS SPECIFIED IN 60.58b(h).
- C) ALL 4-HOUR BLOCK OR 24-HOUR DAILY ARITHMETIC AVERAGE CO EMISSION CONCENTRATIONS, AS APPLICABLE, AS SPECIFIED UNDER 60.58b(i).
- D) ALL 4-HOUR BLOCK ARITHMETIC AVERAGE MUNICIPAL WASTE COMBUSTOR UNIT LOAD LEVELS AND PARTICULATE MATTER CONTROL DEVICE INLET TEMPERATURES AS SPECIFIED UNDER 60.58b(i).

[40CFR 60 Subpart Eb, Section 60.59b]

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25. THE OPERATOR SHALL IDENTIFY THE CALENDAR DATES WHEN ANY OF THE AVERAGE EMISSION CONCENTRATIONS, PERCENT REDUCTIONS, OR OPERATING PARAMETERS RECORDED UNDER (d)(2)(ii)(A) THROUGH (d)(2)(ii)(E) OR THE OPACITY LEVELS RECORDED UNDER (d)(2)(i)(A) OF SECTION 60.59b ARE ABOVE APPLICABLE LIMITS, WITH REASONS FOR SUCH EXCEEDENCES AND A DESCRIPTION OF CORRECTIVE ACTIONS TAKEN.
[40CFR 60 Subpart Eb, Section 60.59b]
26. THE OPERATOR SHALL IDENTIFY CALENDAR DATES FOR WHICH THE MINIMUM NUMBER OF HOURS OF ANY OF THE DATA SPECIFIED IN PARAGRAPHS SECTION 60.59b (d)(6)(i) THROUGH (d)(6)(v) HAVE NOT BEEN OBTAINED INCLUDING REASONS FOR NOT OBTAINING SUFFICIENT DATA AND A DESCRIPTION OF CORRECTIVE ACTIONS TAKEN.
[40CFR 60 Subpart Eb, Section 60.59b]
27. THE OPERATOR SHALL IDENTIFY EACH OCCURRENCE THAT SO_x AND NO_x EMISSIONS DATA OR OPERATIONAL DATA (CO EMISSIONS, UNIT LOAD, AND PARTICULATE MATTER CONTROL DEVICE TEMPERATURE) HAVE BEEN EXCLUDED FROM THE CALCULATION OF AVERAGE EMISSION CONCENTRATIONS OR PARAMETERS, AND THE REASONS FOR EXCLUDING THE DATA.
[40CFR 60 Subpart Eb, Section 60.59b]
28. THE OPERATOR SHALL RECORD THE RESULTS OF DAILY DRIFT TESTS AND QUARTERLY ACCURACY DETERMINATIONS FOR SO_x, NO_x AND CO CEMS AS REQUIRED BY APPENDIX F OF THIS SECTION 60.59b, PROCEDURE I.
[40CFR 60 Subpart Eb, Section 60.59b]
29. THE OPERATOR SHALL RECORD THE TEST REPORTS DOCUMENTING THE RESULTS OF THE INITIAL PERFORMANCE TEST AND ALL ANNUAL PERFORMANCE TESTS LISTED IN SECTION 60.59b (d)(9)(i) AND (d)(9)(ii) ALONG WITH SUPPORTING CALCULATIONS.
[40CFR 60 Subpart Eb, Section 60.59b]
30. THE OPERATOR SHALL RECORD THE FOLLOWING:
 - A) RECORDS SHOWING THE NAMES OF THE MW COMBUSTOR CHIEF FACILITY OPERATOR, SHIFT SUPERVISORS, AND CONTROL ROOM OPERATORS WHO HAVE BEEN PROVISIONALLY CERTIFIED BY AN APPROVED CERTIFICATION PROGRAM AS REQUIRED BY 60.54b(a) INCLUDING DATES IF INITIAL AND RENEWAL CERTIFICATIONS.
 - B) RECORDS SHOWING THE NAMES OF THE MW COMBUSTOR CHIEF FACILITY OPERATOR, SHIFT SUPERVISORS, AND CONTROL ROOM OPERATORS WHO HAVE BEEN FULLY CERTIFIED BY AN APPROVED CERTIFICATION PROGRAM AS REQUIRED BY 60.54b(a) INCLUDING DATES IF INITIAL AND RENEWAL CERTIFICATIONS.
 - C) RECORDS SHOWING THE NAMES OF THE MW COMBUSTOR CHIEF FACILITY OPERATOR, SHIFT SUPERVISORS, AND CONTROL ROOM OPERATORS WHO HAVE COMPLETED THE EPA MW COMBUSTOR OPERATOR TRAINING OR APPROVED EQUIVALENT COURSE AS REQUIRED BY 60.54b(d) INCLUDING DOCUMENTATION OF TRAINING COMPLETION.
[40CFR 60 Subpart Eb, Section 60.59b]

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31. THE OPERATOR SHALL RECORD THE NAMES OF PERSONS THAT HAVE COMPLETED A REVIEW OF THE OPERATIONS MANUAL AS REQUIRED BY 60.54b(f).
[40CFR 60 Subpart Eb, Section 60.59b]
32. CONTROLLED EMISSIONS OF OXIDES OF SULFUR (SO_x) FROM THE COMBUSTOR/BOILER SHALL NOT EXCEED THE MORE STRINGENT OF 17 LB/HR OR 70 PPM, DRY CORRECTED TO 12% CO₂ (3 HOUR AVERAGE), AND THE MORE STRINGENT OF 12 LB/HR OR 26 PPM, DRY CORRECTED TO 12 % CO₂ (8 HOUR AVERAGE).
[RULE 1703 – PSD Analysis]
[40CFR – 52-21 PSD]
33. CONTROLLED EMISSIONS OF THE FOLLOWING POLLUTANTS IN THE EXHAUST FROM THE SYSTEM SHALL NOT EXCEED THE LIMITS SPECIFIED BELOW:
- | | |
|----------------------------------|-------------------------------|
| LEAD | 0.08 LBS/HR (3-HOUR AVERAGE) |
| MERCURY | 0.12 LBS/HR ((3-HOUR AVERAGE) |
| FLUORIDES (AS HYDROGEN FLUORIDE) | 1.1 LBS/HR (3-HOUR AVERAGE) |
- [RULE 1703 – PSD Analysis]
[40CFR – 52-21 PSD]

FACILITY PERMIT TO OPERATE LONG BEACH CITY, SERRF PROJECT

PERMIT TO OPERATE

**Permit No. R-D87610
A/N 274834**

Equipment Description:

AIR POLLUTION CONTROL SYSTEM NO. 3 CONSISTING OF:

1. ROTARY ATOMIZER NO. 3 WITH CYCLONE INLETS VENTING COMBUSTOR/BOILER NO. 3.
2. SPRAY REACTOR TYPE REACTORS WITH CALCIUM HYDROXIDE INJECTION, EACH SERVING ROTARY ATOMIZER NO. 3.
3. BAGHOUSE NO. 3, WITH TEN COMPARTMENTS, REVERSE AIR CLEANING, 73,416 SQ. FT. OF FILTER AREA.
4. INDUCED DRAFT FAN NO. 3 VENTING RESOURCE RECOVERY SYSTEM NO. 3.

Conditions:

1. OPERATION OF THIS EQUIPMENT SHALL BE CONDUCTED IN COMPLIANCE WITH ALL DATA AND SPECIFICATIONS SUBMITTED WITH THE APPLICATION UNDER WHICH THIS PERMIT IS ISSUED UNLESS OTHERWISE NOTED BELOW.
[RULE 204]
2. THIS EQUIPMENT SHALL BE PROPERLY MAINTAINED AND KEPT IN GOOD OPERATING CONDITION AT ALL TIMES.
[RULE 204]
3. THE OWNER OR OPERATOR SHALL COMPLY WITH THE MUNICIPAL WASTE COMBUSTOR OPERATING PRACTICE REQUIREMENTS LISTED IN 40 CFR 60.53b (b) AND (c).
[40CFR 60 Subpart Cb]
4. THE OWNER OR OPERATOR SHALL COMPLY WITH THE MUNICIPAL WASTE COMBUSTOR OPERATOR TRAINING AND CERTIFICATION REQUIREMENTS LISTED IN 40 CFR 60.54b (a) THROUGH (g).
[40CFR Subpart Cb]
5. DUST OR FLYASH COLLECTED IN THE BAGHOUSE COMPARTMENT HOPPERS SHALL BE DISCHARGED ONLY INTO CLOSED CONVEYORS. EXCEPT DURING MAINTENANCE AND REPAIR, DUST OR FLYASH COLLECTED IN THE SPRAY REACTOR SHALL BE REMOVED IN AN ENCLOSED SYSTEM.
[RULE 402; RULE 1303(a)(1)-BACT]

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6. A GAUGE SHALL BE MAINTAINED TO INDICATE, IN INCHES OF WATER PRESSURE, THE STATIC PRESSURE DIFFERENTIAL ACROSS THE BAGS.
[RULE 1303(a)(1)-BACT]
7. THE VOLUME OF LIME SLURRY SUPPLIED TO THE ATOMIZERS FOR SO₂ CONTROL SHALL BE CONTINUOUSLY MEASURED AND RECORDED.
[RULE 1303(a)(1)-BACT]
8. A CONTINUOUS MONITORING SYSTEM TO MONITOR AND RECORD MASS EMISSIONS AND CONCENTRATIONS OF NITROGEN OXIDES (NOX), OXIDES OF SULFUR (SOX) AND CARBON MONOXIDE (CO) IN THE EXHAUST OF THE COMBUSTOR/BOILER STACK, SHALL BE MAINTAINED AND OPERATED IN A MANNER PRESCRIBED IN 40 CFR 60.58b.
[RULE 476; 40CFR 60 Subpart Cb]
9. A CONTINUOUS OXYGEN MONITOR AND RECORDER, AS APPROVED BY THE AQMD, SHALL BE MAINTAINED AND OPERATED IN A MANNER PRESCRIBED IN 40 CFR 60.58b TO MEASURE CONCENTRATIONS OF OXYGEN IN THE EXHAUST OF THE COMBUSTOR/BOILER STACK.
[40CFR 60 Subpart Cb]
10. A SYSTEM, AS APPROVED BY THE AQMD, SHALL BE OPERATED TO CONVERT AND RECORD THE STACK NITROGEN OXIDES CONCENTRATIONS TO 3% OXYGEN ON A DRY BASIS AND REPORT THE RESULTS IN A MANNER WHICH DEMONSTRATES COMPLIANCE WITH RULE 476.
[RULE 476]
11. THE OWNER OR OPERATOR SHALL MAINTAIN AND OPERATE A CONTINUOUS OPACITY MONITOR AND RECORDER IN A MANNER PRESCRIBED IN 40 CFR 60.58b TO MEASURE OPACITY OF FLUE GAS IN THE EXHAUST OF THE COMBUSTOR/BOILER STACK. THE MEASURED OPACITY SHALL NOT EXCEED 10 PERCENT IN 6-MINUTE AVERAGE.
[40CFR 60 Subpart Cb]
12. THE OWNER OR OPERATOR SHALL MAINTAIN AND OPERATE A CONTINUOUS TEMPERATURE MONITOR IN A MANNER PRESCRIBED IN 40 CFR 60.58b TO MONITOR THE TEMPERATURE OF THE FLUE GAS STREAM AT THE INLET TO EACH PARTICULATE MATTER CONTROL DEVICE FOR THE RESOURCE RECOVERY SYSTEM. THE MONITORED TEMPERATURE SHALL NOT EXCEED 17 DEGREES IN CELSIUS (4-HR BLOCK AVERAGE) ABOVE THE MAXIMUM DEMONSTRATED PARTICULATE MATTER CONTROL DEVICE TEMPERATURE AS DEFINED IN 40 CFR 60.51b EXCEPT AS SPECIFIED UNDER 40 CFR 60.53b(c).
[40CFR 60 Subpart Cb]
13. ALL CONTINUOUS EMISSION MONITORS SHALL BE OPERATED IN ACCORDANCE WITH THE REQUIREMENTS AND OPERATING PROCEDURES AS APPROVED BY THE AQMD.
[40CFR 60 Subpart Cb]
14. CONTROLLED EMISSIONS OF OXIDES OF NITROGEN (NOX) IN THE AIR POLLUTION CONTROL SYSTEM EXHAUST FROM THIS SYSTEM SHALL NOT EXCEED 225 PPM (15 MINUTES AVERAGE) AT 3% OXYGEN ON A DRY BASIS.
[RULE 476; RULE 1303(b)(2)-OFFSET]

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15. CONTROLLED NOX EMISSIONS IN THE EXHAUST FROM THE SYSTEM SHALL NOT EXCEED 205 PPMV CORRECTED TO 7% OXYGEN ON A DRY BASIS. WHEN AVERAGING EMISSIONS FROM ALL COMBUSTORS AS ALLOWED IN PART 60.33b(d) OF 40 CFR SUBPART Cb, THE AVERAGED NOX EMISSIONS SHALL NOT EXCEED 180 PPMV CORRECTED TO 7% OXYGEN ON A DRY BASIS (24-HR DAILY ARITHMETIC AVERAGE).
 [40CFR 60 Subpart Cb]
16. CONTROLLED EMISSIONS OF OXIDES OF SULFUR (SOX) FROM THE COMBUSTOR/BOILER SHALL NOT EXCEED THE MORE STRINGENT OF 17 LB/HR OR 70 PPM, DRY CORRECTED TO 12% CO₂ (3 HOUR AVERAGE), AND THE MORE STRINGENT OF 12 LB/HR OR 26 PPM, DRY CORRECTED TO 12 % CO₂ (8 HOUR AVERAGE).
 [RULE 1303(b)(2)-OFFSET]
17. CONTROLLED EMISSIONS OF THE FOLLOWING POLLUTANTS IN THE EXHAUST FROM THE SYSTEM SHALL NOT EXCEED THE LIMITS SPECIFIED BELOW. THE FOLLOWING LIMITS ARE CORRECTED TO 7% OXYGEN ON A DRY BASIS UNLESS OTHERWISE INDICATED:
- | | |
|--------------------------|---|
| OXIDES OF SULFUR (SOX) | 29 PPMV OR 75% WT. REDUCTION (24-HR DAILY GEOMETRIC MEAN) |
| PARTICULATE MATTERS (PM) | 27 mg/DSCM |
| DIOXIN/FURAN | 30 ng/DSCM |
| CADMIUM | 0.04 mg/DSCM |
| LEAD | 0.44 mg/DSCM |
| MERCURY | 0.080 mg/DSCM OR 85% WT. REDUCTION |
| HYDROGEN CHLORIDE | 29 PPMV OR 95% WT. REDUCTION |
| FLUORIDE (AS HF) | 1.1 LBS/HOUR |
- [40CFR 60 Subpart Cb]
18. CONTROLLED EMISSIONS OF CARBON MONOXIDE (CO) IN THE EXHAUST FROM THE SYSTEM SHALL NOT EXCEED 100 PPMV (4-HR ARITHMETIC AVERAGE) CORRECTED TO 7% OXYGEN ON A DRY BASIS.
 [40CFR 60 Subpart Cb]
19. THE CONTROLLED EMISSIONS IN THE EXHAUST FROM THIS SYSTEM SHALL NOT EXCEED THE FOLLOWING LIMITS:
- | <u>CONTAMINANT</u> | <u>LB/DAY</u> |
|----------------------|---------------|
| NITROGEN OXIDES | 816 |
| PM10 | 120 |
| SULFUR OXIDES | 288 |
| CARBON MONOXIDE | 792 |
| REACTIVE ORGANIC GAS | 72 |
| HYDROGEN CHLORIDE | 204 |
- [RULE 1303(b)(2)-OFFSET]

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20. VISIBLE FUGITIVE ASH EMISSIONS FROM AN ASH CONVEYING SYSTEM SHALL NOT EXCEED 5 PERCENT OF THE OBSERVATION PERIOD WHICH IS DEFINED IN 40 CFR 60.58b(k), EXCEPT DURING MAINTENANCE AND REPAIR OF ASH CONVEYING SYSTEMS.
[40CFR 60 Subpart Cb]
21. THE AQMD APPROVED SAMPLING PORTS SHALL BE MAINTAINED IN THE FOLLOWING LOCATIONS:
- A. IN THE DUCT FOLLOWING THE COMBUSTOR/BOILER BUT PRECEDING THE SPRAY REACTOR;
 - B. IN THE DUCT FOLLOWING THE SPRAY REACTOR BUT PRECEDING THE BAGHOUSE;
 - C. IN THE EXHAUST STACK;
 - D. IN THE COMBUSTION AIR INLET DUCT BETWEEN THE INTAKE AND THE COMBUSTOR.
[RULE 204]
22. THE OWNER OR OPERATOR OF SOUTHEAST RESOURCE RECOVERY FACILITY (SERRF) SHALL CONDUCT PERFORMANCE TESTS ON AN ANNUAL BASIS IN ACCORDANCE WITH THE AQMD TEST PROCEDURES AND 40 CFR 60.58b. WRITTEN NOTICE OF SUCH PERFORMANCE TESTS SHALL BE PROVIDED TO THE AQMD SEVEN (7) DAYS PRIOR TO THE TEST SO THAT AN OBSERVER MAY BE PRESENT.

THE PERFORMANCE TESTS SHALL INCLUDE, BUT MAY NOT BE LIMITED TO, A TEST OF ONE OF THE THREE COMBUSTOR/BOILER EXHAUST STREAMS FOLLOWING THE BAGHOUSE UNLESS OTHERWISE REQUESTED BELOW FOR THE FOLLOWING POLLUTANTS:

- A. HYDROCARBONS
- B. PARTICULATE MATTER
- C. HYDROGEN CHLORIDE
- D. EXHAUST FLOW RATE, WET AND DRY
- E. POLYNUCLEAR AROMATIC HYDROCARBONS (BENZO-A-PYRENE, BENZO-E-PYRENE, BENZO-A-ANTHRACENE AND CORONENE).
- F. TETRA- THROUGH OCTA-CHLORINATED DIBENZO-P-DIOXINS AND DIBENZOFURANS
- G. HEAVY METALS (ARSENIC, BERYLLIUM, CADMIUM, CHROMIUM, COPPER, LEAD, MERCURY, NICKEL, AND ZINC)
- H. OPACITY
- I. FLUE GAS TEMPERATURE AT THE INLET TO THE BAGHOUSE DURING DIOXIN/FURAN TEST
- J. LOAD LEVEL (STEAM FLOW OR FEEDWATER FLOW) DURING DIOXIN/FURAN TEST
- K. OXIDES OF NITROGEN (NOX)
- L. OXIDES OF SULFUR (SOX)
- M. CARBON MONOXIDE
- N. FUGITIVE ASH USING EPA METHOD 22

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IF THE PERFORMANCE TESTS OF ALL THREE COMBUSTION UNITS DEMONSTRATE THAT DIOXIN/FURAN EMISSIONS ARE LESS THAN OR EQUAL TO 7 ng/DSCM (TOTAL MASS) FOR A 2-YEAR PERIOD, THE OWNER OR OPERATOR MAY ELECT TO CONDUCT ANNUAL PERFORMANCE TEST ON ONLY ONE OF THE THREE UNITS. UNDER THIS ALTERNATIVE TESTING SCHEDULE, A DIFFERENT UNIT SHALL BE TESTED IN SEQUENCE EACH YEAR. IF ANY ANNUAL TEST INDICATES DIOXIN/FURAN EMISSIONS EXCEED 7 ng/DSCM (TOTAL MASS), PERFORMANCE TESTS SHALL BE CONDUCTED ON ALL THREE COMBUSTION UNITS UNTIL SERRF CAN QUALIFY FOR THE ALTERNATIVE TESTING SCHEDULE.

[RULE 1303(a)(1)-BACT; 40CFR 60 Subpart Cb]

23. THE OWNER OR OPERATOR OF SERRF SHALL SUBMIT WRITTEN RESULTS OF THE PERFORMANCE TESTS TO THE AQMD BY FEBRUARY 1ST OF EACH YEAR FOLLOWING THE CALENDAR YEAR IN WHICH THE TESTS WERE CONDUCTED. THE OWNER OR OPERATOR OF SERRF SHALL ALSO COMPLY WITH THE REPORTING AND RECORDKEEPING REQUIREMENTS SPECIFIED IN 40 CFR 60.59b, AS APPLICABLE.

[RULE 1303(a)(1)-BACT; 40CFR 60 Subpart Cb]

24. ALL RECORDS REQUIRED BY THIS PERMIT OR 40 CFR 60.59b, AS APPLICABLE, SHALL BE MAINTAINED AND KEPT ON FILE FOR A PERIOD OF AT LEAST FIVE YEARS AND BE MADE AVAILABLE TO AQMD PERSONNEL UPON REQUEST.

[RULE 204; 40CFR 60 Subpart Cb]

Periodic Monitoring :

25. THE OPERATOR SHALL USE THIS EQUIPMENT IN SUCH A MANNER THAT THE DIFFERENTIAL PRESSURE ACROSS THE FILTER DOES NOT EXCEED 15 INCHES WATER COLUMN. THE OPERATOR SHALL DETERMINE AND RECORD THE PARAMETER BEING MONITORED ONCE EVERY WEEK.

[RULE 3004 (a)(4)]

26. THE OPERATOR SHALL PERFORM A BIENNIAL INSPECTION OF THE EQUIPMENT AND BAGS FOR LEAKS, BROKEN OR TORN BAGS AND IMPROPERLY INSTALLED BAGS. ADDITIONAL INSPECTION SHALL BE CONDUCTED WHEN THE STACK OPACITY AS MEASURED BY THE CONTINUOUS OPACITY MONITORING SYSTEM EXCEEDS 5% FOR ONE HOUR OR MORE. THE OPERATOR SHALL KEEP RECORDS, IN A MANNER APPROVED BY THE DISTRICT, FOR THE FOLLOWING PARAMETER(S) OR ITEM(S):

A. THE NAME OF THE PERSON PERFORMING THE INSPECTION AND/OR MAINTENANCE OF THE BAGS;

B. THE DATE, TIME AND RESULTS OF THE INSPECTION; AND THE DATE, TIME AND DESCRIPTION OF ANY MAINTENANCE OR REPAIRS RESULTING FROM THE INSPECTION.

[RULE 3004 (a)(4)]

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27. THE OPERATOR SHALL KEEP RECORDS, IN A MANNER APPROVED BY THE AQMD, FOR THE FOLLOWING PARAMETER(S) OR ITEM(S):
TO PROVE COMPLIANCE WITH CONDITION 25.
[RULE 3004 (a)(4)]
28. THE OPERATOR SHALL USE THE DUST COLLECTOR IN SUCH A MANNER THAT THE DIFFERENTIAL PRESSURE ACROSS THE FILTER DOES NOT EXCEED 15 INCHES WATER COLUMN. THE OPERATOR SHALL DETERMINE AND RECORD THIS PARAMETER ONCE EVERY WEEK.
[RULE 3004 (a)(4)]

Emissions and Reporting:

1. THIS EQUIPMENT IS SUBJECT TO THE APPLICABLE REQUIREMENTS OF THE FOLLOWING RULES AND REGULATION:

PM: RULE 404, SEE APPENDIX B FOR EMISSION LIMITS
PM: RULE 405, SEE APPENDIX B FOR EMISSION LIMITS

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PERMIT TO OPERATE

**Permit No. D47903
A/N 103080**

Equipment Description:

LIME RECEIVING AND STORAGE SYSTEM CONSISTING OF:

1. PNEUMATIC CONVEYING SYSTEM CONSISTING WITH A 7.5 H. P. BLOWER, 330 CFM CAPACITY.
2. PEBBLE LIME STORAGE SILO, 100 TON CAPACITY WITH AN INTEGRAL VENT FILTER, TOTAL CLOTH AREA OF 151 SQUARE FEET WITH A PULSE JET CLEANING MECHANISM.

Conditions:

1. OPERATION OF THIS EQUIPMENT SHALL BE CONDUCTED IN ACCORDANCE WITH ALL DATA AND SPECIFICATIONS SUBMITTED WITH THE APPLICATION UNDER WHICH THIS PERMIT IS ISSUED UNLESS OTHERWISE NOTED BELOW.
[RULE 204]
2. THIS EQUIPMENT SHALL BE PROPERLY MAINTAINED AND KEPT IN GOOD OPERATING CONDITION AT ALL TIMES.
[RULE 204]
3. THIS EQUIPMENT SHALL BE OPERATED BY PERSONNEL PROPERLY TRAINED IN ITS OPERATION.
[RULE 204]

Periodic Monitoring:

4. THE OPERATOR SHALL CONDUCT AN INSPECTION FOR VISIBLE EMISSIONS FROM ALL STACKS AND OTHER EMISSION POINTS OF THIS EQUIPMENT WHENEVER THERE IS A PUBLIC COMPLAINT OF VISIBLE EMISSIONS, WHENEVER VISIBLE EMISSIONS ARE OBSERVED, AND ON A SEMI-ANNUAL BASIS, AT LEAST, UNLESS THE EQUIPMENT DID NOT OPERATE DURING THE ENTIRE SEMI-ANNUAL PERIOD. THE ROUTINE SEMI-ANNUAL INSPECTION SHALL BE CONDUCTED WHILE THE EQUIPMENT IS IN OPERATION AND DURING DAYLIGHT HOURS. IF ANY VISIBLE EMISSIONS (NOT INCLUDING CONDENSED WATER VAPOR) ARE DETECTED THAT LAST MORE THAN THREE MINUTES IN ANY ONE-HOUR, THE OPERATOR SHALL EITHER:
 - A. VERIFY AND CERTIFY WITHIN 24 HOURS THAT THE EQUIPMENT CAUSING THE EMISSION AND ANY ASSOCIATED AIR POLLUTION CONTROL EQUIPMENT ARE OPERATING NORMALLY ACCORDING TO THEIR DESIGN AND STANDARD PROCEDURES AND UNDER THE SAME CONDITIONS UNDER WHICH COMPLIANCE WAS ACHIEVED IN THE PAST;
 - B. TAKE CORRECTIVE ACTION(S) THAT ELIMINATES THE VISIBLE EMISSIONS WITHIN 24 HOURS AND REPORT THE VISIBLE EMISSIONS AS A POTENTIAL DEVIATION IN ACCORDANCE WITH THE REPORTING REQUIREMENTS IN SECTION K OF THIS PERMIT; OR

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- C. HAVE A CARB-CERTIFIED SMOKE READER DETERMINE COMPLIANCE WITH THE OPACITY STANDARD, USING EPA METHOD 9 OR THE PROCEDURES IN THE CARB MANUAL "VISIBLE EMISSION EVALUATION", WITHIN THREE BUSINESS DAYS AND REPORT ANY DEVIATIONS TO AQMD.

THE OPERATOR SHALL KEEP THE RECORDS IN ACCORDANCE WITH THE RECORDKEEPING REQUIREMENTS IN SECTION K OF THIS PERMIT AND THE FOLLOWING RECORDS:

- A. STACK OR EMISSION POINT IDENTIFICATION;
 - B. DESCRIPTION OF ANY CORRECTIVE ACTIONS TAKEN TO ABATE VISIBLE EMISSIONS;
 - C. DATE AND TIME VISIBLE EMISSION WAS ABATED; AND
 - D. VISIBLE EMISSION OBSERVATION RECORDED BY A CERTIFIED SMOKE READER.
- [RULE 3004 (a)(4)]

5. THE OPERATOR SHALL KEEP RECORDS, IN A MANNER APPROVED BY THE AQMD, FOR THE FOLLOWING PARAMETER(S) OR ITEM(S):
MONTHLY THROUGHPUT OF PEBBLE LIME.
[RULE 3004 (a)(4)]

Emissions And Requirements:

6. THIS EQUIPMENT IS SUBJECT TO THE APPLICABLE REQUIREMENTS OF THE FOLLOWING RULES AND REGULATION:
- PM: RULE 404, SEE APPENDIX B FOR EMISSION LIMITS
 - PM: RULE 405, SEE APPENDIX B FOR EMISSION LIMITS

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PERMIT TO OPERATE

**Permit No. D87611
A/N 274835**

Equipment Description:

WASTE RECEIVING AND STORAGE SYSTEM CONSISTING OF:

1. TIPPING HALL AND ENCLOSURE, 73' W. X 160' L. X 40' H., WITH THREE TRUCK ACCESS DOORS, EACH 16' W. X 27' H.
2. REFUSE STORAGE PIT AND ENCLOSURE, 50' W. X 210' L. X 77' H.
3. TWO OVERHEAD CHARGING AND BLENDING BRIDGE CRANES, ELECTRIC DRIVEN, EACH WITH A GRAPPLE, SERVING THE REFUSE STORAGE PIT.

Conditions:

1. OPERATION OF THIS EQUIPMENT SHALL BE CONDUCTED IN ACCORDANCE WITH ALL DATA AND SPECIFICATIONS SUBMITTED WITH THE APPLICATION UNDER WHICH THIS PERMIT IS ISSUED UNLESS OTHERWISE NOTED BELOW.
[RULE 204]
2. THIS EQUIPMENT SHALL BE PROPERLY MAINTAINED AND KEPT IN GOOD OPERATING CONDITION AT ALL TIMES.
[RULE 204]
3. THIS EQUIPMENT SHALL BE OPERATED BY PERSONNEL PROPERLY TRAINED IN ITS OPERATION.
[RULE 204; 40CFR 60 Subpart Cb]
4. REFUSE SHALL NOT BE RECEIVED OR STORED IN THE WASTE RECEIVING AND STORAGE BUILDING UNLESS IT IS VENTED ONLY TO TWO OR MORE COMBUSTOR/BOILERS WHICH ARE IN OPERATION. WHEN LESS THAN TWO COMBUSTOR/BOILERS ARE IN OPERATION, THIS BUILDING SHALL BE VENTED TO THE STATIONARY AIR POLLUTION CONTROL SYSTEM.
[RULE 402; RULE 1303(a)(1)-BACT]
5. UNLESS OTHERWISE APPROVED IN WRITING, BY THE AQMD, THE TIPPING HALL AND REFUSE PIT AREA SHALL BE SIMULTANEOUSLY VENTED TO TWO OR MORE COMBUSTOR/BOILERS. IF LESS THAN TWO BOILERS ARE IN OPERATION, VENTING SHALL BE TO THE STANDBY AIR POLLUTION CONTROL SYSTEM.
[RULE 402]
6. THIS FACILITY MAY BE OPERATED AS A TRANSFER STATION ONLY WHEN SUFFICIENT BOILER CAPACITY IS NOT AVAILABLE TO COMBUST THE REFUSE WITHIN A 48 HOUR PERIOD
[RULE 402]

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7. THE TRUCK ACCESS DOORS SHALL REMAIN CLOSED EXCEPT WHEN REFUSE IS BEING RECEIVED OR TRANSFERRED, OR DURING SHORT DURATIONS TO ALLOW FOR VEHICLE TRANSFER. THE TOTAL WEIGHT OF REFUSE RECEIVED EACH DAY SHALL BE RECORDED.
[RULE 402]
8. THIS EQUIPMENT SHALL ONLY BE USED TO RECEIVE AND STORE REFUSE COLLECTED FROM RESIDENTIAL SOURCES, COMMERCIAL SOURCES OR OTHER SOURCES AS APPROVED IN A MANNER PRESCRIBED IN WRITING BY THE AQMD. ANY MATERIAL SPECIFICALLY DESIGNATED AS HAZARDOUS WASTE SHALL NOT BE RECEIVED OR STORED UNLESS OTHERWISE APPROVED IN A MANNER PRESCRIBED BY THE AQMD.
[RULE 1402; 40CFR 60 Subpart Cb]
9. ALL MATERIALS THAT ARE LISTED AS HAZARDOUS BY A FEDERAL OR STATE AGENCY OR APPEAR ON A FEDERAL OR STATE CANDIDATE LIST SHALL BE CONSIDERED "HAZARDOUS MATERIAL" FOR THE PURPOSE OF THIS PERMIT.
[RULE 402; 40CFR 60 Subpart Cb]

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PERMIT TO OPERATE

**Permit No. D47904
A/N 103081**

Equipment Description:

STANDBY AIR POLLUTION CONTROL SYSTEM CONSISTING OF:

1. TWO ACTIVATED CARBON FILTER UNITS, ROOF MOUNTED, EACH CONTAINING 2400 POUNDS OF CARBON AND TWO PREFILTERS, VENTING THE TIPPING HALL AND WASTE RECEIVING AREA.
2. TWO EXHAUST BLOWERS, 40 HORSEPOWER, 4200 CFM CAPACITY EACH.

Conditions:

1. OPERATION OF THIS EQUIPMENT SHALL BE CONDUCTED IN COMPLIANCE WITH ALL DATA AND SPECIFICATIONS SUBMITTED WITH THE APPLICATION UNDER WHICH THIS PERMIT IS ISSUED UNLESS OTHERWISE NOTED BELOW.
[RULE 204]
2. THIS EQUIPMENT SHALL BE PROPERLY MAINTAINED AND KEPT IN GOOD OPERATING CONDITION AT ALL TIMES.
[RULE 204]
3. THIS EQUIPMENT SHALL BE OPERATED BY PERSONNEL PROPERLY TRAINED IN ITS OPERATION.
[RULE 204; 40CFR 60 Subpart Cb]
4. THE ACTIVATED CARBON FILTER UNITS SHALL BE INSPECTED ANNUALLY FOR BOTH REMAINING CARBON LIFE AND ODOR REMOVAL EFFICIENCY.
[RULE 402]
5. OPERATION OF THIS EQUIPMENT MAY SUBJECT THE OWNER OR OPERATOR TO LIABILITY UNDER SECTION 113 AND OTHER SECTIONS OF THE CLEAN AIR ACT (FEDERAL ENFORCEMENT) UNLESS SUCH OWNER OR OPERATOR HAS RECEIVED FROM THE ENVIRONMENTAL PROTECTION AGENCY CONFIRMATION IN WRITING THAT ISSUANCE OF THIS PERMIT TO OPERATE IS CONSISTENT WITH THE APPROVED CALIFORNIA STATE IMPLEMENTATION PLAN.
[RULE 204]

Periodic Monitoring:

6. THE OPERATOR SHALL KEEP RECORDS, IN A MANNER APPROVED BY THE AQMD, FOR THE FOLLOWING PARAMETER(S) OR ITEM(S):
TO PROVE COMPLIANCE WITH CONDITION 4.
[RULE 3004 (a)(4)]

FACILITY PERMIT TO OPERATE LONG BEACH CITY, SERRF PROJECT

PERMIT TO OPERATE

**Permit No. F35537
A/N 312316**

Equipment Description:

BOTTOM ASH HANDLING, TREATMENT AND STORAGE SYSTEM CONSISTING OF:

1. TWO BOTTOM ASH RESIDUE CONVEYORS, VIBRATORY TYPE, BOTH SERVING ALL THREE COMBUSTOR/BOILERS OF THE RESOURCE RECOVERY SYSTEMS # 1, 2 AND 3.
2. THREE ASH QUENCH TANKS, WITH RAM EXTRACTORS, EACH SERVING ONE COMBUSTOR/BOILER OF THE RESOURCE RECOVERY SYSTEMS # 1, 2 AND 3.
3. TWO BOTTOM ASH BELT CONVEYORS.
4. SIX DRAG CHAIN UNDERGRATE SIFTING CONVEYORS, SERVING THE THREE COMBUSTOR/BOILERS AND DISCHARGING INTO THE THREE ASH QUENCH TANKS WITH RAM EXTRACTORS IDENTIFIED IN #2 ABOVE.
5. SIX COMBUSTOR/BOILER 4TH PASS SCREW CONVEYORS, SERVING THE THREE COMBUSTOR/BOILERS AND DISCHARGING INTO THE THREE ASH QUENCH TANKS WITH RAM EXTRACTORS IDENTIFIED IN #2 ABOVE.
6. ASH/RESIDUE STORAGE BUILDING, 76' L. X 104' W. X 22' H., ENCLOSED, WITH TRUCK ACCESS DOORS, EACH 18' W. X 18' H.
7. PHOSPHORIC ACID STORAGE TANK, 10,000 GALLON CAPACITY, COMMON TO THE FLYASH TREATMENT SYSTEM.
8. HOOD VENTILATION SYSTEM VENTING THE PHOSPHATE TREATMENT AREA TO THE EXISTING COMBUSTOR/BOILERS.
9. BUCKET ELEVATOR, CEMENT TRANSPORT, BOTTOM ASH VIBRATING GRIZZLY SCREEN DISCHARGE.
10. BOTTOM ASH GRIZZLY SCREEN, VIBRATORY TYPE (BOTTOM ASH BELT CONVEYOR DISCHARGE UNDERS), 6'-0" WIDE, TWO INCH SCREENING.
11. TWO BOTTOM ASH CONVEYORS, VIBRATORY TYPE, GRIZZLY SCREEN DISCHARGE.
12. SIX SCREW CONVEYORS, CEMENT TRANSPORT (FROM AN EXISTING CEMENT BIN TO A LOCATION BELOW THE BOTTOM ASH SCREEN).
13. PNEUMATIC CONVEYOR, CEMENT TRANSPORT (FROM AN EXISTING CEMENT BIN TO A LOCATION BELOW THE BOTTOM ASH SCREEN).

FACILITY PERMIT TO OPERATE LONG BEACH CITY, SERRF PROJECT

Conditions:

1. OPERATION OF THIS EQUIPMENT SHALL BE CONDUCTED IN COMPLIANCE WITH ALL DATA AND SPECIFICATIONS SUBMITTED WITH THE APPLICATION UNDER WHICH THIS PERMIT IS ISSUED UNLESS OTHERWISE NOTED BELOW.
[RULE 204]
2. THIS EQUIPMENT SHALL BE PROPERLY MAINTAINED AND KEPT IN GOOD OPERATING CONDITION AT ALL TIMES.
[RULE 204]
3. THIS EQUIPMENT SHALL BE OPERATED BY PERSONNEL PROPERLY TRAINED IN ITS OPERATION.
[RULE 204; 40CFR 60 Subpart Cb]
4. ALL STORED BOTTOM ASH SHALL BE CONTAINED WITHIN THE ASH STORAGE BUILDING, OR IN THE WASTE RECEIVING AND STORAGE BUILDING, BOTH OF WHICH ARE VENTED TO PERMITTED AIR POLLUTION CONTROL EQUIPMENT WHICH IS IN FULL USE.
[RULE 402]
5. THE TRUCK ACCESS DOORS OF THE ASH STORAGE BUILDING SHALL REMAIN CLOSED EXCEPT WHEN ASH IS BEING RECEIVED OR TRANSFERRED, OR DURING SHORT DURATIONS TO ALLOW FOR VEHICLE TRANSFER.
[RULE 402]
6. THIS EQUIPMENT SHALL NOT BE OPERATED UNLESS THE BUILDING VENTILATION (WITH FILTERS) SYSTEM IS IN FULL OPERATION.
[RULE 402]
7. THE CEMENT AND PHOSPHATE TREATMENT SHALL NOT BE ADDED TO THE BOTTOM ASH STORAGE PILE UNLESS THE HOOD VENTILATION SYSTEM IS IN FULL OPERATION.
[RULE 402]
8. ALL BOTTOM ASH AND RESIDUE FROM THE GRATES, BOILER HOPPERS AND SIFTINGS FROM UNDER THE GRATES SHALL BE DISCHARGED ONLY INTO THE ASH QUENCH TANK EXCEPT DURING BOILER CLEANING.
[RULE 402]
9. THE BOTTOM ASH FROM THE COMBUSTOR/BOILER SHALL BE SATURATED WITH WATER PRIOR TO LEAVING THE QUENCH TANKS TO PREVENT FUGITIVE DUST EMISSIONS.
[RULE 402]
10. THE BOTTOM ASH AND RESIDUE IN THE STORAGE BUILDING SHALL REMAIN SUFFICIENTLY MOIST TO PREVENT FUGITIVE DUST EMISSIONS DURING TREATMENT, STORAGE, AND HANDLING OPERATIONS.
[RULE 402]
11. ASH AND RESIDUE TRANSPORTED FROM THE ASH AND RESIDUE STORAGE BUILDING SHALL BE TRANSPORTED ONLY IN TRUCK BEDS OR TRAILERS THAT ARE SECURELY COVERED.
[RULE 402]

FACILITY PERMIT TO OPERATE LONG BEACH CITY, SERRF PROJECT

12. THE EXTERIOR OF TRUCKS (INCLUDING THE TIRES) WHICH ARE USED TO HAUL THE ASH AND RESIDUE SHALL BE CLEANED PRIOR TO LEAVING THE STORAGE BUILDING.
[RULE 402]

Periodic Monitoring:

13. THE OPERATOR SHALL CONDUCT AN INSPECTION FOR VISIBLE EMISSIONS FROM ALL STACKS AND OTHER EMISSION POINTS OF THIS EQUIPMENT WHENEVER THERE IS A PUBLIC COMPLAINT OF VISIBLE EMISSIONS, WHENEVER VISIBLE EMISSIONS ARE OBSERVED, AND ON A SEMI-ANNUAL BASIS, AT LEAST, UNLESS THE EQUIPMENT DID NOT OPERATE DURING THE ENTIRE SEMI-ANNUAL PERIOD. THE ROUTINE SEMI-ANNUAL INSPECTION SHALL BE CONDUCTED WHILE THE EQUIPMENT IS IN OPERATION AND DURING DAYLIGHT HOURS. IF ANY VISIBLE EMISSIONS (NOT INCLUDING CONDENSED WATER VAPOR) ARE DETECTED THAT LAST MORE THAN THREE MINUTES IN ANY ONE-HOUR, THE OPERATOR SHALL EITHER:

- A. VERIFY AND CERTIFY WITHIN 24 HOURS THAT THE EQUIPMENT CAUSING THE EMISSION AND ANY ASSOCIATED AIR POLLUTION CONTROL EQUIPMENT ARE OPERATING NORMALLY ACCORDING TO THEIR DESIGN AND STANDARD PROCEDURES AND UNDER THE SAME CONDITIONS UNDER WHICH COMPLIANCE WAS ACHIEVED IN THE PAST;
- B. TAKE CORRECTIVE ACTION(S) THAT ELIMINATES THE VISIBLE EMISSIONS WITHIN 24 HOURS AND REPORT THE VISIBLE EMISSIONS AS A POTENTIAL DEVIATION IN ACCORDANCE WITH THE REPORTING REQUIREMENTS IN SECTION K OF THIS PERMIT; OR
- C. HAVE A CARB-CERTIFIED SMOKE READER DETERMINE COMPLIANCE WITH THE OPACITY STANDARD, USING EPA METHOD 9 OR THE PROCEDURES IN THE CARB MANUAL "VISIBLE EMISSION EVALUATION", WITHIN THREE BUSINESS DAYS AND REPORT ANY DEVIATIONS TO AQMD.

THE OPERATOR SHALL KEEP THE RECORDS IN ACCORDANCE WITH THE RECORDKEEPING REQUIREMENTS IN SECTION K OF THIS PERMIT AND THE FOLLOWING RECORDS:

- A. STACK OR EMISSION POINT IDENTIFICATION;
- B. DESCRIPTION OF ANY CORRECTIVE ACTIONS TAKEN TO ABATE VISIBLE EMISSIONS;
- C. DATE AND TIME VISIBLE EMISSION WAS ABATED; AND
- D. VISIBLE EMISSION OBSERVATION RECORDED BY A CERTIFIED SMOKE READER.

[RULE 3004 (a)(4)]

14. THE OPERATOR SHALL KEEP RECORDS, IN A MANNER APPROVED BY THE AQMD, FOR THE FOLLOWING PARAMETER(S) OR ITEM(S):
MONTHLY ASH THROUGHPUT.
[RULE 3004 (a)(4)]

Emissions And Requirements:

15. THIS EQUIPMENT IS SUBJECT TO THE APPLICABLE REQUIREMENTS OF THE FOLLOWING RULES AND REGULATION:

PM: RULE 405, SEE APPENDIX B FOR EMISSION LIMITS

FACILITY PERMIT TO OPERATE LONG BEACH CITY, SERRF PROJECT

PERMIT TO OPERATE

**Permit No. F35591
A/N 312317**

Equipment Description:

FLYASH HANDLING, TREATMENT AND STORAGE SYSTEM CONSISTING OF:

1. EIGHT SCREW CONVEYORS, SERVING THE THREE BAGHOUSE TRAINS OF AIR POLLUTION CONTROL SYSTEM NOS. 1, 2 AND 3 (PERMIT NOS R-D87608, R-D87609, AND R-D87610), ONE ENCLOSED DRAG CHAIN CONVEYORS DISCHARGE.
2. ONE DRAG CHAIN CONVEYORS, ENCLOSED, FOUR ENCLOSED DRAG CHAIN CONVEYORS DISCHARGE.
3. THREE DRAG CHAIN CONVEYORS, ENCLOSED, FEEDING TWO FLYASH STORAGE SILOS.
4. FLYASH STORAGE SILO, 15'- 5" DIA. X 59' H., 7067 CU. FT. CAPACITY, AN INTEGRAL DUST COLLECTOR/FILTER, 700 CFM MAXIMUM FLOWRATE AND 170 SQ. FT. FILTER AREA, AND A ROTARY FEEDER, SCREW CONVEYOR DISCHARGE.
5. FLYASH STORAGE SILO, 15'- 5" DIA. X 59' H., 7067 CU. FT. CAPACITY, AN INTEGRAL DUST COLLECTOR/FILTER, 100 CFM MAXIMUM FLOWRATE AND 39 SQ. FT. FILTER AREA, AND A ROTARY FEEDER, SCREW CONVEYOR DISCHARGE.
6. TWO SCREW CONVEYOR, IN SERIES, BUCKET ELEVATOR DISCHARGE.
7. BUCKET ELEVATOR, FEEDING A WEIGH BIN, DISCHARGING INTO A BATCH MIXING UNIT.
8. PHOSPHATE STORAGE TANK, 10,000 GALLON CAPACITY, COMMON TO THE BOTTOM ASH TREATMENT SYSTEM.
9. BATCH MIXING UNIT, DUSTMASTER, 4.5 CUBIC YARD CAPACITY, FOUR ENCLOSED BELT CONVEYORS DISCHARGE.
10. THREE BELT CONVEYORS, ENCLOSED, PROCESSED ASH, ASH STORAGE BUILDING (LOCATED IN THE BOTTOM ASH HANDLING BUILDING) DISCHARGE.
11. REFUSE LOADOUT AREA, ENCLOSED, WITH TWO TRUCK ACCESS DOORS, EACH 18' W. X 18' H. VENTED TO THE EXISTING COMBUSTOR/BOILERS.
12. HOOD VENTILATION SYSTEM WITH AN IN-LINE SCRUBBER VENTED TO THE EXISTING COMBUSTOR/BOILERS.

FACILITY PERMIT TO OPERATE LONG BEACH CITY, SERRF PROJECT

Conditions:

1. OPERATION OF THIS EQUIPMENT SHALL BE CONDUCTED IN COMPLIANCE WITH ALL DATA AND SPECIFICATIONS SUBMITTED WITH THE APPLICATION UNDER WHICH THIS PERMIT IS ISSUED UNLESS OTHERWISE NOTED BELOW.
[RULE 204]
2. THIS EQUIPMENT SHALL BE PROPERLY MAINTAINED AND KEPT IN GOOD OPERATING CONDITION AT ALL TIMES.
[RULE 204]
3. THIS EQUIPMENT SHALL BE OPERATED BY PERSONNEL PROPERLY TRAINED IN ITS OPERATION.
[RULE 204; 40CFR 60 Subpart Cb]
4. SOLID MATERIAL SHALL NOT LEAVE THE ASH CONDITIONER IN A DRY STATE THAT WILL CREATE FUGITIVE DUST EMISSIONS.
[RULE 402]
5. THE FLYASH STORAGE SILO SHALL NOT BE OPERATED UNLESS IT IS VENTED THROUGH ITS DUST COLLECTOR/FILTER WHICH IS IN FULL USE.
[RULE 402; RULE 1303(a)(1)-BACT]
6. DUSTS COLLECTED IN THE DUST COLLECTOR/FILTER MUST BE DISCHARGED ONLY INTO CLOSED CONTAINERS.
[RULE 402; RULE 1303(a)(1)-BACT]
7. ALL STORED ASH SHALL BE CONTAINED WITHIN THE LOADOUT AREA OF THE REFUSE STORAGE PIT BUILDING.
[RULE 402]
8. ASH AND RESIDUE TRANSPORTED OFF SITE FROM THE LOADOUT AREA OF THE REFUSE STORAGE PIT BUILDING SHALL BE TRANSPORTED ONLY IN TRUCK BEDS OR TRAILERS THAT ARE SECURELY COVERED.
[RULE 402]
9. THE EXTERIOR OF TRUCKS (INCLUDING THE TIRES), WHICH ARE USED TO HAUL THE ASH AND RESIDUE, SHALL BE CLEAN PRIOR TO LEAVING THE STORAGE BUILDING.
[RULE 402]
10. THE TRUCK ACCESS DOORS SHALL REMAIN CLOSED EXCEPT WHEN ASH IS BEING RECEIVED OR TRANSFERRED, OR FOR SHORT DURATIONS TO ALLOW VEHICLE TRANSFER.
[RULE 402]
11. THE BATCH MIXING UNIT SHALL NOT BE OPERATED UNLESS THE FILTERED HOOD VENTILATION SYSTEM IS IN FULL USE.
[RULE 1303(a)(1)-BACT]

FACILITY PERMIT TO OPERATE LONG BEACH CITY, SERRF PROJECT

12. A DAILY LOG OF MATERIAL DISCHARGED FROM THE SILOS AND USED IN THE MIXING PROCESS (THE AMOUNT IN TONS PER DAY), SHALL BE MAINTAINED AND KEPT ON FILE FOR A MINIMUM OF TWO YEARS AND SHALL BE MADE AVAILABLE TO AQMD PERSONNEL UPON REQUEST.
[RULE 204]

Periodic Monitoring:

13. THE OPERATOR SHALL CONDUCT AN INSPECTION FOR VISIBLE EMISSIONS FROM ALL STACKS AND OTHER EMISSION POINTS OF THIS EQUIPMENT WHENEVER THERE IS A PUBLIC COMPLAINT OF VISIBLE EMISSIONS, WHENEVER VISIBLE EMISSIONS ARE OBSERVED, AND ON A SEMI-ANNUAL BASIS, AT LEAST, UNLESS THE EQUIPMENT DID NOT OPERATE DURING THE ENTIRE SEMI-ANNUAL PERIOD. THE ROUTINE SEMI-ANNUAL INSPECTION SHALL BE CONDUCTED WHILE THE EQUIPMENT IS IN OPERATION AND DURING DAYLIGHT HOURS. IF ANY VISIBLE EMISSIONS (NOT INCLUDING CONDENSED WATER VAPOR) ARE DETECTED THAT LAST MORE THAN THREE MINUTES IN ANY ONE-HOUR, THE OPERATOR SHALL EITHER:
- A. VERIFY AND CERTIFY WITHIN 24 HOURS THAT THE EQUIPMENT CAUSING THE EMISSION AND ANY ASSOCIATED AIR POLLUTION CONTROL EQUIPMENT ARE OPERATING NORMALLY ACCORDING TO THEIR DESIGN AND STANDARD PROCEDURES AND UNDER THE SAME CONDITIONS UNDER WHICH COMPLIANCE WAS ACHIEVED IN THE PAST;
 - B. TAKE CORRECTIVE ACTION(S) THAT ELIMINATES THE VISIBLE EMISSIONS WITHIN 24 HOURS AND REPORT THE VISIBLE EMISSIONS AS A POTENTIAL DEVIATION IN ACCORDANCE WITH THE REPORTING REQUIREMENTS IN SECTION K OF THIS PERMIT; OR
 - C. HAVE A CARB-CERTIFIED SMOKE READER DETERMINE COMPLIANCE WITH THE OPACITY STANDARD, USING EPA METHOD 9 OR THE PROCEDURES IN THE CARB MANUAL "VISIBLE EMISSION EVALUATION", WITHIN THREE BUSINESS DAYS AND REPORT ANY DEVIATIONS TO AQMD.

THE OPERATOR SHALL KEEP THE RECORDS IN ACCORDANCE WITH THE RECORDKEEPING REQUIREMENTS IN SECTION K OF THIS PERMIT AND THE FOLLOWING RECORDS:

- A. STACK OR EMISSION POINT IDENTIFICATION;
 - B. DESCRIPTION OF ANY CORRECTIVE ACTIONS TAKEN TO ABATE VISIBLE EMISSIONS;
 - C. DATE AND TIME VISIBLE EMISSION WAS ABATED; AND
 - D. VISIBLE EMISSION OBSERVATION RECORDED BY A CERTIFIED SMOKE READER.
- [RULE 3004 (a)(4)]

Emissions And Requirements:

14. THIS EQUIPMENT IS SUBJECT TO THE APPLICABLE REQUIREMENTS OF THE FOLLOWING RULES AND REGULATION:

PM: RULE 404, SEE APPENDIX B FOR EMISSION LIMITS
PM: RULE 405, SEE APPENDIX B FOR EMISSION LIMITS

FACILITY PERMIT TO OPERATE LONG BEACH CITY, SERRF PROJECT

PERMIT TO OPERATE

**Permit No. D84221
A/N 256070**

Equipment Description:

CEMENT RECEIVING AND STORAGE SYSTEM CONSISTING OF:

1. CEMENT SILO, 12' DIA. X 59' H., 4874 CU. FT. CAPACITY, SERVING BOTH THE FLYASH AND BOTTOM ASH TREATMENT SYSTEMS.
2. INTEGRAL DUST COLLECTOR/FILTER, 700 CFM CAPACITY, WITH 170 SQ. FT. FILTER AREA.

Conditions:

1. OPERATION OF THIS EQUIPMENT SHALL BE CONDUCTED IN COMPLIANCE WITH ALL DATA AND SPECIFICATIONS SUBMITTED WITH THE APPLICATION UNDER WHICH THIS PERMIT IS ISSUED UNLESS OTHERWISE NOTED BELOW.
[RULE 204]
2. THIS EQUIPMENT SHALL BE PROPERLY MAINTAINED AND KEPT IN GOOD OPERATING CONDITION AT ALL TIMES.
[RULE 204]
3. THE CEMENT STORAGE SILO MUST NOT BE OPERATED UNLESS IT IS VENTED THROUGH THE DUST COLLECTOR/FILTER WHICH IS IN FULL USE.
[RULE 402; RULE 1303(a)(1)-BACT]
4. DUSTS COLLECTED IN THE DUST COLLECTOR/FILTER MUST BE DISCHARGED ONLY INTO CLOSED CONTAINERS.
[RULE 402; RULE 1303(a)(1)-BACT]
5. A DAILY LOG OF MATERIAL DISCHARGED FROM THE SILO AND USED IN THE MIXING PROCESS (THE AMOUNT IN TONS PER DAY), SHALL BE MAINTAINED AND KEPT ON FILE FOR A MINIMUM OF TWO YEARS AND SHALL BE MADE AVAILABLE TO AQMD REPRESENTATIVES UPON REQUEST.
[RULE 204]

Periodic Monitoring:

6. THE OPERATOR SHALL CONDUCT AN INSPECTION FOR VISIBLE EMISSIONS FROM ALL STACKS AND OTHER EMISSION POINTS OF THIS EQUIPMENT WHENEVER THERE IS A PUBLIC COMPLAINT OF VISIBLE EMISSIONS, WHENEVER VISIBLE EMISSIONS ARE OBSERVED, AND ON A SEMI-ANNUAL BASIS, AT LEAST, UNLESS THE EQUIPMENT DID NOT OPERATE DURING THE ENTIRE SEMI-ANNUAL PERIOD. THE ROUTINE SEMI-ANNUAL INSPECTION SHALL BE CONDUCTED WHILE THE EQUIPMENT IS IN OPERATION AND DURING DAYLIGHT HOURS. IF ANY VISIBLE EMISSIONS (NOT INCLUDING CONDENSED WATER VAPOR) ARE DETECTED THAT LAST MORE THAN THREE MINUTES IN ANY ONE-HOUR, THE OPERATOR SHALL EITHER:

FACILITY PERMIT TO OPERATE LONG BEACH CITY, SERRF PROJECT

- A. VERIFY AND CERTIFY WITHIN 24 HOURS THAT THE EQUIPMENT CAUSING THE EMISSION AND ANY ASSOCIATED AIR POLLUTION CONTROL EQUIPMENT ARE OPERATING NORMALLY ACCORDING TO THEIR DESIGN AND STANDARD PROCEDURES AND UNDER THE SAME CONDITIONS UNDER WHICH COMPLIANCE WAS ACHIEVED IN THE PAST;
- B. TAKE CORRECTIVE ACTION(S) THAT ELIMINATES THE VISIBLE EMISSIONS WITHIN 24 HOURS AND REPORT THE VISIBLE EMISSIONS AS A POTENTIAL DEVIATION IN ACCORDANCE WITH THE REPORTING REQUIREMENTS IN SECTION K OF THIS PERMIT;
OR
- C. HAVE A CARB-CERTIFIED SMOKE READER DETERMINE COMPLIANCE WITH THE OPACITY STANDARD, USING EPA METHOD 9 OR THE PROCEDURES IN THE CARB MANUAL "VISIBLE EMISSION EVALUATION", WITHIN THREE BUSINESS DAYS AND REPORT ANY DEVIATIONS TO AQMD.

THE OPERATOR SHALL KEEP THE RECORDS IN ACCORDANCE WITH THE RECORDKEEPING REQUIREMENTS IN SECTION K OF THIS PERMIT AND THE FOLLOWING RECORDS:

- A. STACK OR EMISSION POINT IDENTIFICATION;
- B. DESCRIPTION OF ANY CORRECTIVE ACTIONS TAKEN TO ABATE VISIBLE EMISSIONS;
- C. DATE AND TIME VISIBLE EMISSION WAS ABATED; AND
- D. VISIBLE EMISSION OBSERVATION RECORDED BY A CERTIFIED SMOKE READER.
[RULE 3004 (a)(4)]

Emissions And Requirements:

- 7. THIS EQUIPMENT IS SUBJECT TO THE APPLICABLE REQUIREMENTS OF THE FOLLOWING RULES AND REGULATION:
 - PM: RULE 404, SEE APPENDIX B FOR EMISSION LIMITS
 - PM: RULE 405, SEE APPENDIX B FOR EMISSION LIMITS

FACILITY PERMIT TO OPERATE LONG BEACH CITY, SERRF PROJECT

PERMIT TO OPERATE

**Permit No. D63565
A/N 168554**

Equipment Description:

WASTEWATER TREATMENT SYSTEM CONSISTING OF:

1. TWO OILY WATER SEPARATORS, AFL INDUSTRIES, VERTICAL TUBE-COALESING TYPE, EACH 6'- 4" W. X 10'- 6" H., 200 GPM EACH WITH TWO 5 H.P. WATER PUMPS, ONE 1 H.P. OIL PUMP AND ONE ½ H.P. SLUDGE PUMP.
2. ONE 18,000 GALLON TREATED WASTEWATER HOLDING TANK.
3. APPROVED WASTE HOLDING CONTAINERS.

Conditions:

1. OPERATION OF THIS EQUIPMENT SHALL BE CONDUCTED IN COMPLIANCE WITH ALL DATA AND SPECIFICATIONS SUBMITTED WITH THE APPLICATION UNDER WHICH THIS PERMIT IS ISSUED UNLESS OTHERWISE NOTED BELOW.
[RULE 204]
2. THIS EQUIPMENT SHALL BE PROPERLY MAINTAINED AND KEPT IN GOOD OPERATING CONDITION AT ALL TIMES.
[RULE 204]
3. OILY MATERIAL AND SLUDGE RECLAIMED FROM THIS EQUIPMENT SHALL ONLY BE DISCHARGED IN SEALABLE 55 GALLON DRUMS AND DISPOSED OF PROPERLY OFFSITE.
[RULE 402]

Periodic Monitoring:

4. THE OPERATOR SHALL KEEP RECORDS, IN A MANNER APPROVED BY THE AQMD, FOR THE FOLLOWING PARAMETER(S) OR ITEM(S):
MONTHLY THROUGHPUT OF OIL, SLUDGE AND TREATED WASTEWATER.
[RULE 3004 (a)(4)]

FACILITY PERMIT TO OPERATE LONG BEACH CITY, SERRF PROJECT

PERMIT TO OPERATE

**Permit No. D90967
A/N 170674**

Equipment Description:

SANITARY HOLDING STATION CONSISTING OF:

1. SEWAGE LIFT STATION, 8'-0" DIA.
2. SEPTIC TANK, 38'-0" L. X 5'-0" W. X 13'-0" H., 6000 GALLON CAPACITY.
3. EFFLUENT STORAGE TANK, 38'-0" L. X 14'-0" W. X 13'-0" H., 40,000 GALLON CAPACITY.

Conditions:

1. OPERATION OF THIS EQUIPMENT SHALL BE CONDUCTED IN COMPLIANCE WITH ALL DATA AND SPECIFICATIONS SUBMITTED WITH THE APPLICATION UNDER WHICH THIS PERMIT IS ISSUED UNLESS OTHERWISE NOTED BELOW.
[RULE 204]
2. THIS EQUIPMENT SHALL BE PROPERLY MAINTAINED AND KEPT IN GOOD OPERATING CONDITION AT ALL TIMES.
[RULE 204]
3. THIS EQUIPMENT SHALL NOT BE OPERATED UNLESS VAPORS FROM THE SEPTIC TANK AND EFFLUENT STORAGE TANK ARE VENTED TO AN AIR POLLUTION CONTROL DEVICE WHICH HAS BEEN ISSUE A VALID PERMIT BY THE EXECUTIVE OFFICER OR DESIGNEE.
[RULE402]

Periodic Monitoring:

4. THE OPERATOR SHALL KEEP RECORDS, IN A MANNER APPROVED BY THE AQMD, FOR THE FOLLOWING PARAMETER(S) OR ITEM(S):
MONTHLY TURNOVER IN GALLONS AT THE EFFLUENT STORAGE TANK.
[RULE 3004 (a)(4)]

FACILITY PERMIT TO OPERATE LONG BEACH CITY, SERRF PROJECT

PERMIT TO OPERATE

**Permit No. D90968
A/N 171069**

Equipment Description:

AIR POLLUTION CONTROL SYSTEM CONSISTING OF:

1. AIR AND GAS FILTRATION SYSTEM UNISORB, 6'- 8" L. X 4'- 6" W. X 3'- 0" H., WITH A PREFILTER, 13.5 SQ. FT. FACE AREA, AND A CARBON BED, 13.5 SQ. FT. FACE AREA.
2. EXHAUST SYSTEM WITH A BLOWER VENTING A SEPTIC TANK AND AN EFFLUENT STORAGE TANK.

Conditions:

1. OPERATION OF THIS EQUIPMENT SHALL BE CONDUCTED IN COMPLIANCE WITH ALL DATA AND SPECIFICATIONS SUBMITTED WITH THE APPLICATION UNDER WHICH THIS PERMIT IS ISSUED UNLESS OTHERWISE NOTED BELOW.
[RULE 204]
2. THIS EQUIPMENT SHALL BE PROPERLY MAINTAINED AND KEPT IN GOOD OPERATING CONDITION AT ALL TIMES.
[RULE 204]
3. H₂S CONCENTRATION AT THE OUTLET OF THE CARBON ADSORBER SHALL NOT EXCEED 1 PPMV.
[RULE 402; RULE 1303(a)(1)-BACT]
4. MEASUREMENT OF H₂S CONCENTRATION AT THE OUTLET OF THE ADSORBER SHALL BE CONDUCTED AND RECORDED WEEKLY TO SHOW COMPLIANCE WITH CONDITION NO. 3. THE RECORDS SHALL BE KEPT ON FILE FOR AT LEAST TWO YEARS AND BE MADE AVAILABLE TO AQMD PERSONNEL UPON REQUEST.
[RULE 204]

FACILITY PERMIT TO OPERATE LONG BEACH CITY, SERRF PROJECT

PERMIT TO OPERATE

**Permit No. D18150
A/N 190427**

Equipment Description:

EMERGENCY INTERNAL COMBUSTION ENGINE, CUMMINS, DIESEL-FUELED, MODEL NO. NT885F3, SERIAL NO. 11384542, SIX CYLINDERS, FOUR CYCLE, TURBO-CHARGED, 288 BHP, WITH ONE EXHAUST.

Conditions:

1. OPERATION OF THIS EQUIPMENT SHALL BE CONDUCTED IN COMPLIANCE WITH ALL DATA AND SPECIFICATIONS SUBMITTED WITH THE APPLICATION UNDER WHICH THIS PERMIT IS ISSUED UNLESS OTHERWISE NOTED BELOW.
[RULE 204]
2. THIS EQUIPMENT SHALL BE PROPERLY MAINTAINED AND KEPT IN GOOD OPERATING CONDITION AT ALL TIMES.
[RULE 204]
3. THE IGNITION TIMING OF THIS ENGINE SHALL BE INSPECTED, ADJUSTED, AND CERTIFIED AT A MINIMUM OF ONCE EVERY THREE YEARS OF OPERATION. INSPECTIONS, ADJUSTMENTS, AND CERTIFICATIONS MUST BE PERFORMED BY A QUALIFIED MECHANIC AND DONE IN ACCORDANCE WITH THE ENGINE MANUFACTURER'S SPECIFICATIONS AND PROCEDURES.
[RULE 1303(a)(1)-BACT]
4. THE OPERATOR SHALL LIMIT THE OPERATING TIME TO NO MORE THAN 199 HOURS IN ANY ONE YEAR.
[RULE 1110.2; RULE 1304(a)(4)-MODELING AND OFFSET EXEMPTION]
5. THE SULFUR CONTENT OF THE FUEL SUPPLIED TO THE ENGINE SHALL NOT EXCEED 0.05% BY WEIGHT.
[RULE 431.2]

Periodic Monitoring:

6. THE OPERATOR SHALL INSTALL AND MAINTAIN A NON-RESETABLE ELAPSED TIME METER TO ACCURATELY INDICATE THE ELAPSED OPERATING TIME OF THE ENGINE.
[RULE 3004 (a)(4)]
7. THE OPERATOR SHALL KEEP RECORDS, IN A MANNER APPROVED BY THE AQMD, FOR THE FOLLOWING PARAMETER(S) OR ITEM(S):
TO PROVE COMPLIANCE WITH CONDITION 4.
[RULE 3004 (a)(4)]

FACILITY PERMIT TO OPERATE LONG BEACH CITY, SERRF PROJECT

Emissions And Requirements:

8. THIS EQUIPMENT IS SUBJECT TO THE APPLICABLE REQUIREMENTS OF THE FOLLOWING RULES AND REGULATION:

PM: RULE 404, SEE APPENDIX B FOR EMISSION LIMITS

FACILITY PERMIT TO OPERATE LONG BEACH CITY, SERRF PROJECT

PERMIT TO OPERATE

**Permit No. D18149
A/N 190426**

Equipment Description:

EMERGENCY INTERNAL COMBUSTION ENGINE, CUMMINS, DIESEL-FUELED, MODEL NO. NT885F3, SERIAL NO. 11389142, SIX CYLINDERS, FOUR CYCLE, TURBO-CHARGED, 288 BHP, WITH ONE EXHAUST.

Conditions:

1. OPERATION OF THIS EQUIPMENT SHALL BE CONDUCTED IN COMPLIANCE WITH ALL DATA AND SPECIFICATIONS SUBMITTED WITH THE APPLICATION UNDER WHICH THIS PERMIT IS ISSUED UNLESS OTHERWISE NOTED BELOW.
[RULE 204]
2. THIS EQUIPMENT SHALL BE PROPERLY MAINTAINED AND KEPT IN GOOD OPERATING CONDITION AT ALL TIMES.
[RULE 204]
3. THE IGNITION TIMING OF THIS ENGINE SHALL BE INSPECTED, ADJUSTED, AND CERTIFIED AT A MINIMUM OF ONCE EVERY THREE YEARS OF OPERATION. INSPECTIONS, ADJUSTMENTS, AND CERTIFICATIONS MUST BE PERFORMED BY A QUALIFIED MECHANIC AND DONE IN ACCORDANCE WITH THE ENGINE MANUFACTURER'S SPECIFICATIONS AND PROCEDURES.
[RULE 1303(a)(1)-BACT]
4. THE OPERATOR SHALL LIMIT THE OPERATING TIME TO NO MORE THAN 199 HOURS IN ANY ONE YEAR.
[RULE 1110.2; RULE 1304(a)(4)-MODELING AND OFFSET EXEMPTION]
5. THE SULFUR CONTENT OF THE FUEL SUPPLIED TO THE ENGINE SHALL NOT EXCEED 0.05% BY WEIGHT.
[RULE 431.2]

Periodic Monitoring:

6. THE OPERATOR SHALL INSTALL AND MAINTAIN A NON-RESETABLE ELAPSED TIME METER TO ACCURATELY INDICATE THE ELAPSED OPERATING TIME OF THE ENGINE.
[RULE 3004 (a)(4)]
7. THE OPERATOR SHALL KEEP RECORDS, IN A MANNER APPROVED BY THE AQMD, FOR THE FOLLOWING PARAMETER(S) OR ITEM(S):
TO PROVE COMPLIANCE WITH CONDITION 4.
[RULE 3004 (a)(4)]

FACILITY PERMIT TO OPERATE LONG BEACH CITY, SERRF PROJECT

Emissions And Requirements:

8. THIS EQUIPMENT IS SUBJECT TO THE APPLICABLE REQUIREMENTS OF THE FOLLOWING RULES AND REGULATION:

PM: RULE 404, SEE APPENDIX B FOR EMISSION LIMITS

FACILITY PERMIT TO OPERATE LONG BEACH CITY, SERRF PROJECT

PERMIT TO OPERATE

**Permit No. F41727
A/N 385591**

Equipment Description:

INTERNAL COMBUSTION ENGINE, CUMMINS, DIESEL-FUELED, MODEL NO. 6CTA8-3-240, SIX CYLINDERS, TURBO-CHARGED, AFTERCOOLED, 240 BHP, DRIVING A VACUUM BLOWER.

Conditions:

1. OPERATION OF THIS EQUIPMENT SHALL BE CONDUCTED IN COMPLIANCE WITH ALL DATA AND SPECIFICATIONS SUBMITTED WITH THE APPLICATION UNDER WHICH THIS PERMIT IS ISSUED UNLESS OTHERWISE NOTED BELOW.
[RULE 204]
2. THIS EQUIPMENT SHALL BE PROPERLY MAINTAINED AND KEPT IN GOOD OPERATING CONDITION AT ALL TIMES.
[RULE 204]
3. THE SULFUR CONTENT OF THE FUEL SUPPLIED TO THE ENGINE SHALL NOT EXCEED 0.05% BY WEIGHT.
[RULE 431.2]

Emissions And Requirements:

6. THIS EQUIPMENT IS SUBJECT TO THE APPLICABLE REQUIREMENTS OF THE FOLLOWING RULES AND REGULATION:

PM: RULE 404, SEE APPENDIX B FOR EMISSION LIMITS

FACILITY PERMIT TO OPERATE LONG BEACH CITY, SERRF PROJECT

PERMIT TO OPERATE

Permit No.
A/N 428058

Equipment Description:

WASTE RECEIVING AND STORAGE SYSTEM CONSISTING OF:

1. TIPPING HALL AND ENCLOSURE, 73' W. X 160' L. X 40' H., WITH THREE TRUCK ACCESS DOORS, EACH 16' W. X 27' H.
2. REFUSE STORAGE PIT AND ENCLOSURE, 50' W. X 210' L. X 77' H.
3. TWO OVERHEAD CHARGING AND BLENDING BRIDGE CRANES, ELECTRIC DRIVEN, EACH WITH A GRAPPLE, SERVING THE REFUSE STORAGE PIT.

Conditions:

1. OPERATION OF THIS EQUIPMENT SHALL BE CONDUCTED IN ACCORDANCE WITH ALL DATA AND SPECIFICATIONS SUBMITTED WITH THE APPLICATION UNDER WHICH THIS PERMIT IS ISSUED UNLESS OTHERWISE NOTED BELOW.
[RULE 204]
2. THIS EQUIPMENT SHALL BE PROPERLY MAINTAINED AND KEPT IN GOOD OPERATING CONDITION AT ALL TIMES.
[RULE 204]
3. THIS EQUIPMENT SHALL BE OPERATED BY PERSONNEL PROPERLY TRAINED IN ITS OPERATION.
[RULE 204; 40CFR 60 Subpart Cb]
4. REFUSE SHALL NOT BE RECEIVED OR STORED IN THE WASTE RECEIVING AND STORAGE BUILDING UNLESS IT IS VENTED ONLY TO TWO OR MORE COMBUSTOR/BOILERS WHICH ARE IN OPERATION. WHEN LESS THAN TWO COMBUSTOR/BOILERS ARE IN OPERATION, THIS BUILDING SHALL BE VENTED TO THE STATIONARY AIR POLLUTION CONTROL SYSTEM.
[RULE 402; RULE 1303(a)(1)-BACT]
5. UNLESS OTHERWISE APPROVED IN WRITING, BY THE AQMD, THE TIPPING HALL AND REFUSE PIT AREA SHALL BE SIMULTANEOUSLY VENTED TO TWO OR MORE COMBUSTOR/BOILERS. IF LESS THAN TWO BOILERS ARE IN OPERATION, VENTING SHALL BE TO THE STANDBY AIR POLLUTION CONTROL SYSTEM.
[RULE 402]
6. THE TRUCK ACCESS DOORS SHALL REMAIN CLOSED EXCEPT WHEN REFUSE IS BEING RECEIVED OR TRANSFERRED, OR DURING SHORT DURATIONS TO ALLOW FOR VEHICLE TRANSFER. THE TOTAL WEIGHT OF REFUSE RECEIVED EACH DAY SHALL BE RECORDED.
[RULE 402]

FACILITY PERMIT TO OPERATE LONG BEACH CITY, SERRF PROJECT

7. THIS EQUIPMENT SHALL ONLY BE USED TO RECEIVE AND STORE REFUSE COLLECTED FROM RESIDENTIAL SOURCES, COMMERCIAL SOURCES OR OTHER SOURCES AS APPROVED IN A MANNER PRESCRIBED IN WRITING BY THE AQMD. ANY MATERIAL SPECIFICALLY DESIGNATED AS HAZARDOUS WASTE SHALL NOT BE RECEIVED OR STORED UNLESS OTHERWISE APPROVED IN A MANNER PRESCRIBED BY THE AQMD.
[RULE 1402; 40CFR 60 Subpart Cb]
8. ALL MATERIALS THAT ARE LISTED AS HAZARDOUS BY A FEDERAL OR STATE AGENCY OR APPEAR ON A FEDERAL OR STATE CANDIDATE LIST SHALL BE CONSIDERED "HAZARDOUS MATERIAL" FOR THE PURPOSE OF THIS PERMIT.
[RULE 402; 40CFR 60 Subpart Cb]

FACILITY PERMIT TO OPERATE LONG BEACH CITY, SERRF PROJECT

RULE 219 EQUIPMENT

Equipment Description:

RULE 219 EXEMPT EQUIPMENT, COATING EQUIPMENT, PORTABLE, ARCHITECTURAL COATINGS.

Periodic Monitoring:

1. THE OPERATOR SHALL KEEP RECORDS, IN A MANNER APPROVED BY THE AQMD, FOR THE FOLLOWING PARAMETER(S) OR ITEM(S):

FOR ARCHITECTURAL APPLICATIONS WHERE NO THINNERS, REDUCERS, OR OTHER VOC CONTAINING MATERIALS ARE ADDED, MAINTAIN SEMI-ANNUAL RECORDS OF ALL COATINGS CONSISTING OF:

- A. COATING TYPE,
- B. VOC CONTENT AS SUPPLIED IN GRAMS PER LITER (g/l) OF MATERIALS FOR LOW-SOLIDS COATINGS'
- C. VOC CONTENT AS SUPPLIED IN g/l OF COATING, LESS WATER AND EXEMPT SOLVENT, FOR OTHER COATING.

FOR OTHER ARCHITECTURAL APPLICATIONS WHERE THINNERS, REDUCERS, OR OTHER VOC CONTAINING MATERIALS ARE ADDED, MAINTAIN DAILY RECORDS FOR EACH COATING CONSISTING OF:

- A. COATING TYPE,
 - B. VOC CONTENT AS APPLIED IN GRAMS PER LITER (g/l) OF MATERIALS USED FOR LOW-SOLIDS COATINGS'
 - C. VOC CONTENT AS APPLIED IN g/l OF COATING, LESS WATER AND EXEMPT SOLVENT, FOR OTHER COATING.
- [RULE 3004 (a) (4)]

Emissions And Requirements:

2. THIS EQUIPMENT IS SUBJECT TO THE APPLICABLE REQUIREMENTS OF THE FOLLOWING RULES AND REGULATION:

VOC: RULE 1113, SEE APPENDIX B FOR EMISSION LIMITS

VOC: RULE 1171, SEE APPENDIX B FOR EMISSION LIMITS

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RULE 219 EQUIPMENT

Equipment Description:

RULE 219 EXEMPT EQUIPMENT, HAND WIPING OPERATION.

Emissions And Requirements:

1. THIS EQUIPMENT IS SUBJECT TO THE APPLICABLE REQUIREMENTS OF THE FOLLOWING RULES AND REGULATIONS:

VOC: RULE 1171, SEE APPENDIX B FOR EMISSION LIMITS

FACILITY PERMIT TO OPERATE LONG BEACH CITY, SERRF PROJECT

RULE 219 EQUIPMENT

Equipment Description:

RULE 219 EXEMPT EQUIPMENT, AIR CONDITIONING UNITS

Emissions And Requirements:

1. THIS EQUIPMENT IS SUBJECT TO THE APPLICABLE REQUIREMENTS OF THE FOLLOWING RULES AND REGULATIONS:

REFRIGERANT:	RULE 1415
REFRIGERANT:	40CFR 82 SUBART F

FACILITY PERMIT TO OPERATE LONG BEACH CITY, SERRF PROJECT

RULE 219 EQUIPMENT

Equipment Description:

RULE 219 EXEMPT EQUIPMENT, ABRASIVE BLASTING EQUIPMENT, GLOVE-BOX, < 53 FT3, WITH DUST FILTER.

Periodic Monitoring:

1. THE OPERATOR SHALL PERFORM AN ANNUAL INSPECTION OF THE EQUIPMENT AND FILTER MEDIA FOR LEAKS, BROKEN OR TORN FILTER MEDIA AND IMPROPERLY INSTALLED FILTER MEDIA. THE OPERATOR SHALL KEEP RECORDS, IN A MANNER APPROVED BY THE AQMD, FOR THE FOLLOWING PARAMETER(S) OR ITEM(S):
 - A. THE NAME OF THE PERSON PERFORMING THE INSPECTION AND/OR MAINTENANCE OF THE FILTER MEDIA;
 - B. THE DATE, TIME AND RESULTS OF THE INSPECTION; AND
 - C. THE DATE, TIME AND DESCRIPTION OF ANY MAINTENANCE OR REPAIRS RESULTING FROM THE INSPECTION.[RULE 3004 (a)(4)]
2. THE OPERATOR SHALL DISCHARGE DUST COLLECTED IN THIS EQUIPMENT ONLY INTO CLOSED CONTAINERS.
[RULE 3004 (a)(4)]
3. THE OPERATOR SHALL CONDUCT AN INSPECTION FOR VISIBLE EMISSIONS FROM ALL STACKS AND OTHER EMISSION POINTS OF THIS EQUIPMENT WHENEVER THERE IS A PUBLIC COMPLAINT OF VISIBLE EMISSIONS, WHENEVER VISIBLE EMISSIONS ARE OBSERVED, AND ON AN ANNUAL BASIS, AT LEAST, UNLESS THE EQUIPMENT DID NOT OPERATE DURING THE ENTIRE ANNUAL PERIOD. THE ROUTINE ANNUAL INSPECTION SHALL BE CONDUCTED WHILE THE EQUIPMENT IS IN OPERATION AND DURING DAYLIGHT HOURS. IF ANY VISIBLE EMISSIONS (NOT INCLUDING CONDENSED WATER VAPOR) ARE DETECTED, THE OPERATOR SHALL TAKE CORRECTIVE ACTION(S) THAT ELIMINATES THE VISIBLE EMISSIONS WITHIN 24 HOURS AND REPORT THE VISIBLE EMISSIONS AS A POTENTIAL DEVIATION IN ACCORDANCE WITH THE REPORTING REQUIREMENTS IN SECTION K OF THIS PERMIT.
THE OPERATOR SHALL KEEP THE RECORDS IN ACCORDANCE WITH THE RECORDKEEPING REQUIREMENTS IN SECTION K OF THIS PERMIT AND THE FOLLOWING RECORDS:
 - A. STACK OR EMISSION POINT IDENTIFICATION;
 - B. DESCRIPTION OF ANY CORRECTIVE ACTIONS TAKEN TO ABATE VISIBLE EMISSIONS; AND
 - C. DATE AND TIME VISIBLE EMISSION WAS ABATED.[RULE 3004 (a)(4)]

Emissions And Requirements:

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4. THIS EQUIPMENT IS SUBJECT TO THE APPLICABLE REQUIREMENTS OF THE FOLLOWING RULES AND REGULATIONS:

PM: RULE 404, SEE APPENDIX B FOR EMISSION LIMITS
PM: RULE 405, SEE APPENDIX B FOR EMISSION LIMITS
PM: RULE 1140, SEE APPENDIX B FOR EMISSION LIMITS

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RULE 219 EQUIPMENT

Equipment Description:

RULE 219 EXEMPT EQUIPMENT, FIRE EXTINGUISHING EQUIPMENT

Emissions And Requirements:

1. THIS EQUIPMENT IS SUBJECT TO THE APPLICABLE REQUIREMENTS OF THE FOLLOWING RULES AND REGULATIONS:

HALON: RULE 1418

FACILITY PERMIT TO OPERATE LONG BEACH CITY, SERRF PROJECT

RULE 219 EQUIPMENT

Equipment Description:

RULE 219 EXEMPT EQUIPMENT, CLEANING EQUIPMENT, SMALL UNHEATED, NON-CONVEYORIZED.

Emissions And Requirements:

1. THIS EQUIPMENT IS SUBJECT TO THE APPLICABLE REQUIREMENTS OF THE FOLLOWING RULES AND REGULATIONS:

VOC: RULE 1122

VOC: RULE 1171, SEE APPENDIX B FOR EMISSION LIMITS

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RULE 219 EQUIPMENT

Equipment Description:

RULE 219 EXEMPT EQUIPMENT, COOLING TOWERS.

Emissions And Requirements:

1. THIS EQUIPMENT IS SUBJECT TO THE APPLICABLE REQUIREMENTS OF THE FOLLOWING RULES AND REGULATIONS:
CR^{*6}: RULE 1404

FACILITY PERMIT TO CONSTRUCT LONG BEACH CITY, SERRF PROJECT

Facility Equipment and Requirements (Section H)

This section consists of a table listing all permitted equipment at the facility, facility wide requirements, all individual Permits to Construct issued to various equipment at the facility subject to source-specific requirements. Each permit will list operating conditions including periodic monitoring requirements, and applicable emission limits and requirements that the equipment is subject to. Also included is the rule origin and authority of each emission limit and permit condition.

FACILITY PERMIT TO CONSTRUCT LONG BEACH CITY, SERRF PROJECT

PERMITTED EQUIPMENT LIST

THE FOLLOWING IS A LIST OF ALL PERMITS TO CONSTRUCT AT THIS FACILITY:

Application No.	Equipment description	Page
483532	RESOURCE RECOVERY SYSTEM #1	3
483533	RESOURCE RECOVERY SYSTEM #2	10
483534	RESOURCE RECOVERY SYSTEM #3	17
497362	CARBON INJECTION SYSTEM	24
497359	APC SYSTEM #1	25
497360	APC SYSTEM #2	31
497361	APC SYSTEM #3	37

NOTE: ANY OTHER APPLICATIONS THAT ARE STILL BEING PROCESSED AND HAVE NOT BEEN ISSUED PERMITS TO CONSTRUCT WILL NOT BE FOUND IN THIS TITLE V PERMIT

FACILITY PERMIT TO CONSTRUCT LONG BEACH CITY, SERRF PROJECT

PERMIT TO CONSTRUCT

**Granted as of
A/N 483532**

Equipment Description:

RESOURCE RECOVERY SYSTEM NO. 1 CONSISTING OF:

1. REFUSE RECEIVING HOPPER, CHARGING MUNICIPAL SOLID WASTE FIRED BOILER NO. 1.
2. COMBUSTOR/BOILER NO. 1, MUNICIPAL SOLID WASTE FIRED, L.C. STEINNULLER, WATER WALL TYPE, WITH RECIPROCATING GRATES, TWO NATURAL GAS FIRED AUXILIARY BURNERS WITH A COMBINED RATING OF 2,200,000 SCF/DAY, A MULTI-LEVEL AMMONIA INJECTION SYSTEM, UNDER GRATE PRIMARY COMBUSTION AIR FAN THAT VENTS THE WASTE RECEIVING AND STORAGE SYSTEM, AND OVER FIRE SECONDARY COMBUSTION AIR FAN.
3. CO BURNER, STEINMUELLER, MODEL NO. SSBG40, NATURAL GAS FIRED, 14.5 MM BTU PER HOUR.
4. BOILER SECTION, WATER TUBE TYPE, CONSISTING OF A SUPERHEATER, ECONOMIZER, TUBULAR STEAM COIL AIR PREHEATER, WITH MECHANICAL AND PNEUMATIC RAPPERS, AND EACH WITH A CAPACITY OF 130,000 POUNDS PER HOUR DAILY AVERAGE OF STEAM AT 660 PSIA AND 752 DEGREES FAHRENHEIT.
5. STEAM TURBINE, IMO DELAVAL, MODEL MJ-MZ-SF, 37,504 KW (COMMON TO RESOURCE RECOVERY SYSTEMS NO. 1, 2 AND 3).
6. GENERATOR, GEC ALSTHOM, MODEL T216-255 (COMMON TO RESOURCE RECOVERY SYSTEMS NO. 1, 2 AND 3).
7. AQUEOUS AMMONIA STORAGE TANK, 24,000 GALLON CAPACITY (COMMON TO RESOURCE RECOVERY SYSTEMS NO. 1, 2 AND 3).
8. BOILER IMPULSE CLEANING SYSTEM, GE POWERWAVE+, ETHYLENE GAS FIRED, SPARK IGNITED, 12 POWERWAVE DETONATION UNITS.

Conditions

1. OPERATION OF THIS EQUIPMENT SHALL BE CONDUCTED IN COMPLIANCE WITH ALL DATA AND SPECIFICATIONS SUBMITTED WITH THE APPLICATION UNDER WHICH THIS PERMIT IS ISSUED UNLESS OTHERWISE NOTED BELOW.
[RULE 204]

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2. THIS EQUIPMENT SHALL BE PROPERLY MAINTAINED AND KEPT IN GOOD OPERATING CONDITION AT ALL TIMES.
[RULE 204]
3. THIS EQUIPMENT SHALL BE OPERATED BY PERSONNEL PROPERLY TRAINED IN ITS OPERATION. THIS FACILITY SHALL BE IN COMPLIANCE WITH THE APPLICABLE OPERATOR REQUIREMENTS AS SPECIFIED UNDER 40 CFR 60.54b.
[RULE 204; 40CFR 60 Subpart Cb]
4. THE COMBUSTOR/BOILER EQUIPMENT SHALL NOT BE OPERATED UNLESS IT IS VENTED ONLY TO AIR POLLUTION CONTROL EQUIPMENT WHICH IS IN FULL USE AND HAS BEEN ISSUED A VALID PERMIT BY THE AQMD.
[RULE 402; RULE 1303(a)(1)-BACT]
5. THE COMBUSTOR/BOILER EQUIPMENT SHALL NOT BE OPERATED UNLESS ALL OF ITS PRIMARY COMBUSTION AIR IS VENTED FROM THE TIPPING HALL AND THE MUNICIPAL SOLID WASTE (REFUSE) PIT OF THE REFUSE RECEIVING AND STORAGE SYSTEM.
[RULE 402]
6. THIS EQUIPMENT MAY ONLY BE USED TO BURN REFUSE COLLECTED FROM RESIDENTIAL SOURCES, COMMERCIAL SOURCES AND OTHER SOURCES AS APPROVED AND IN A MANNER PRESCRIBED IN WRITING BY THE AQMD. ANY MATERIAL SPECIFICALLY DESIGNATED AS HAZARDOUS MATERIAL OR HAZARDOUS WASTE SHALL NOT BE BURNED UNLESS OTHERWISE APPROVED AND IN A MANNER PRESCRIBED IN WRITING BY THE AQMD.
[RULE 204; RULE 1402; 40CFR 60 Subpart Cb]
7. ALL MATERIALS THAT ARE LISTED AS HAZARDOUS BY A FEDERAL OR STATE AGENCY OR APPEAR ON A FEDERAL OR STATE CANDIDATE LIST SHALL BE CONSIDERED "HAZARDOUS MATERIAL" FOR THE PURPOSE OF THIS PERMIT.
[RULE 204]
8. NATURAL GAS SHALL BE FIRED IN THIS COMBUSTOR ONLY FOR THE SUPPORT OF GOOD COMBUSTION OF REFUSE AND FOR PERIODS OF WARM-UP, START-UP AND SHUTDOWN. NATURAL GAS SHALL NOT BE USED FOR THE SOLE PURPOSE OF GENERATING POWER. DAILY NATURAL GAS CONSUMPTION SHALL BE MEASURED AND RECORDED.
[RULE 1303(a)(1)-BACT; RULE 1303(b)(2)-OFFSET]
9. DURING THE WARM-UP PERIOD, NATURAL GAS FIRING MAY CONTINUE UNTIL THE STEAM TURBINE REACHES FULL LOAD. FOR THE PURPOSE OF THIS PERMIT, A WARM-UP SHALL BE DEFINED AS THE PERIOD OF TIME FROM WHICH THE NATURAL GAS BURNER IS INITIALLY FIRED TO THE TIME REFUSE IS FIRST INTRODUCED INTO THE FURNACE.
[RULE 1303(a)(1)-BACT]
10. START-UP BEGINS WHEN THE FACILITY STARTS THE CONTINUOUS BURNING OF REFUSE AND DOES NOT INCLUDE ANY WARM UP PERIOD.
[40CFR 60 Subpart Eb]

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11. SHUTDOWN BEGINS WHEN THE FACILITY CEASES REFUSE CHARGING TO THE COMBUSTOR, UNTIL COMPLETE REFUSE BURNOUT IS ACHIEVED. DURING SHUTDOWN, THE COMBUSTOR SHALL BURN NATURAL GAS UNTIL ALL REFUSE ON THE GRATES HAS BEEN COMBUSTED.
[RULE 1303(a)(1)-BACT; 40CFR 60 Subpart Eb]
12. THE APPLICABLE STANDARDS OF PERFORMANCE UNDER 40CFR 60 SUBPARTS Cb AND Eb, SHALL APPLY AT ALL TIMES EXCEPT DURING PERIODS OF START-UP, SHUTDOWN, OR MALFUNCTION. THE DURATION OF START-UP, SHUTDOWN OR MALFUNCTION PERIODS SHALL COMPLY WITH 40CFR 60 SUBPART Eb SECTION 60.58b.
[40CFR 60 Subpart Cb; 40CFR 60 Subpart Eb]
13. THE COMBUSTOR/BOILER EQUIPMENT SHALL NOT BE OPERATED UNLESS THE SELECTIVE NON-CATALYTIC REDUCTION (SNCR) SYSTEM IS IN OPERATION, EXCEPT DURING THE PERIODS OF WARM-UP, SHUTDOWN OR WHEN THE FLUE GAS TEMPERATURE IS LESS THAN 1,200 DEGREES FAHRENHEIT.
[RULE 1303(a)(1)-BACT]
14. RESIDUE FROM THE GRATES, BOILER HOPPERS, AND SIFTINGS FROM UNDER THE GRATES SHALL BE DISCHARGED ONLY INTO AN ASH QUENCH TANK.
[RULE 402]
15. THE OWNER OR OPERATOR SHALL MAINTAIN AND OPERATE A CONTINUOUS LOAD MONITOR AND RECORDER IN A MANNER PRESCRIBED IN 40 CFR 60.58b, TO MEASURE AND RECORD STEAM FLOW OR FEEDWATER FLOW RATE TO DETERMINE THAT THE RESOURCE RECOVERY SYSTEM IS NOT OPERATING AT A LOAD LEVEL GREATER THAN 110 PERCENT OF THE MAXIMUM DEMONSTRATED MUNICIPAL WASTE COMBUSTOR UNIT LOAD AS DEFINED IN 40 CFR 60.51b EXCEPT AS SPECIFIED UNDER 40 CFR 60.53b(b). THE STEAM FLOW OR FEEDWATER FLOW SHALL BE CALCULATED IN 4-HOUR BLOCK ARITHMETIC AVERAGES.
[40CFR 60 Subpart Cb]
16. THE COMBUSTOR/BOILER SHALL BE OPERATED TO PROVIDE A MINIMUM GAS RETENTION TIME OF ONE SECOND AT A TEMPERATURE ABOVE 1,800 DEGREES FAHRENHEIT, AS SHOWN BY A MINIMUM ROOF TEMPERATURE READING OF 1,000 DEGREES FAHRENHEIT, EXCEPT DURING WARM-UP, START-UP AND SHUTDOWN.
[RULE 1303(a)(1)-BACT]
17. VISIBLE FUGITIVE ASH EMISSIONS FROM AN ASH CONVEYING SYSTEM SHALL NOT EXCEED 5 PERCENT OF THE OBSERVATION PERIOD WHICH IS DEFINED IN 40 CFR 60.58b(k), EXCEPT DURING MAINTENANCE AND REPAIR OF ASH CONVEYING SYSTEMS.
[RULE 402; 40CFR 60 Subpart Cb]
18. ALL RECORDS REQUIRED BY THIS PERMIT OR 40 CFR 60.59b, AS APPLICABLE, INCLUDING BUT NOT LIMITED TO CONDITION NOS. 23 THROUGH 31, SHALL BE MAINTAINED AND KEPT ON FILE FOR A PERIOD OF AT LEAST FIVE YEARS AND SHALL BE MADE AVAILABLE TO AQMD PERSONNEL UPON REQUEST.
[RULE 204; 40CFR 60 Subpart Cb]

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19. THE OWNER OR OPERATOR SHALL COMPLY WITH THE MUNICIPAL WASTE COMBUSTOR OPERATING PRACTICE REQUIREMENTS LISTED IN 40 CFR PART 60.53b (b) AND (c).
[40CFR 60 Subpart Cb]
20. THE OWNER OR OPERATOR SHALL COMPLY WITH THE MUNICIPAL WASTE COMBUSTOR OPERATOR TRAINING AND CERTIFICATION REQUIREMENTS LISTED IN 40 CFR 60.54b (a) THROUGH (g).
[40CFR Subpart Cb]

Periodic Monitoring:

21. THE OPERATOR SHALL CONDUCT AN INSPECTION FOR VISIBLE EMISSIONS FROM ALL STACKS AND OTHER EMISSION POINTS OF THIS EQUIPMENT WHENEVER THERE IS A PUBLIC COMPLAINT OF VISIBLE EMISSIONS, WHENEVER VISIBLE EMISSIONS ARE OBSERVED, AND ON A SEMI-ANNUAL BASIS, AT LEAST, UNLESS THE EQUIPMENT DID NOT OPERATE DURING THE ENTIRE SEMI-ANNUAL PERIOD. THE ROUTINE SEMI-ANNUAL INSPECTION SHALL BE CONDUCTED WHILE THE EQUIPMENT IS IN OPERATION AND DURING DAYLIGHT HOURS. IF ANY VISIBLE EMISSIONS (NOT INCLUDING CONDENSED WATER VAPOR) ARE DETECTED THAT LAST MORE THAN THREE MINUTES IN ANY ONE-HOUR, THE OPERATOR SHALL EITHER:
 - A. VERIFY AND CERTIFY WITHIN 24 HOURS THAT THE EQUIPMENT CAUSING THE EMISSION AND ANY ASSOCIATED AIR POLLUTION CONTROL EQUIPMENT ARE OPERATING NORMALLY ACCORDING TO THEIR DESIGN AND STANDARD PROCEDURES AND UNDER THE SAME CONDITIONS UNDER WHICH COMPLIANCE WAS ACHIEVED IN THE PAST;
 - B. TAKE CORRECTIVE ACTION(S) THAT ELIMINATES THE VISIBLE EMISSIONS WITHIN 24 HOURS AND REPORT THE VISIBLE EMISSIONS AS A POTENTIAL DEVIATION IN ACCORDANCE WITH THE REPORTING REQUIREMENTS IN SECTION K OF THIS PERMIT; OR
 - C. HAVE A CARB-CERTIFIED SMOKE READER DETERMINE COMPLIANCE WITH THE OPACITY STANDARD, USING EPA METHOD 9 OR THE PROCEDURES IN THE CARB MANUAL "VISIBLE EMISSION EVALUATION", WITHIN THREE BUSINESS DAYS AND REPORT ANY DEVIATIONS TO AQMD.

THE OPERATOR SHALL KEEP THE RECORDS IN ACCORDANCE WITH THE RECORDKEEPING REQUIREMENTS IN SECTION K OF THIS PERMIT AND THE FOLLOWING RECORDS:

- A. STACK OR EMISSION POINT IDENTIFICATION;
- B. DESCRIPTION OF ANY CORRECTIVE ACTIONS TAKEN TO ABATE VISIBLE EMISSIONS;
- C. DATE AND TIME VISIBLE EMISSION WAS ABATED; AND
- D. VISIBLE EMISSION OBSERVATION RECORDED BY A CERTIFIED SMOKE READER.
[RULE 3004 (a)(4)]

FACILITY PERMIT TO CONSTRUCT LONG BEACH CITY, SERRF PROJECT

Emissions And Requirements:

22. THIS EQUIPMENT IS SUBJECT TO THE APPLICABLE REQUIREMENTS OF THE FOLLOWING RULES AND REGULATION:
- PM: RULE 404, SEE APPENDIX B FOR EMISSION LIMITS
 - PM: RULE 405, SEE APPENDIX B FOR EMISSION LIMITS
 - PM: 0.1 gr/scf, RULE 409
 - PM: 11 lb/hr AND 0.01 gr/scf, RULE 475
 - PM: 11 lb/hr AND 0.01 gr/scf, RULE 476
 - PM: 0.18 g/dscm, CORRECTED TO 12% CO₂, 40 CFR Subpart E
 - CO: 2000 PPMv, RULE 407
 - SOx: 500 PPMv, RULE 407
 - NOx: 225 PPMv, RULE 476
23. THE OPERATOR SHALL RECORD THE FOLLOWING PARAMETERS AND MAKE THEM AVAILABLE FOR SUBMITTAL TO THE ADMINISTRATOR OR ON-SITE REVIEW BY AN INSPECTOR:
- A) ALL 6-MINUTE AVERAGE OPACITY LEVELS AS SPECIFIED IN 60.58b(c).
 - B) ALL 1-HOUR AVERAGE SO_x EMISSION CONCENTRATIONS AS SPECIFIED UNDER 60.58b(e).
 - C) ALL 1-HOUR AVERAGE NO_x EMISSION CONCENTRATIONS AS SPECIFIED UNDER 60.58b(h).
 - D) ALL 1-HOUR AVERAGE CO EMISSION CONCENTRATIONS, MUNICIPAL WASTE COMBUSTOR UNIT LOAD MEASUREMENTS, AND PARTICULATE MATTER CONTROL DEVICE INLET TEMPERATURES AS SPECIFIED UNDER 60.58b(i).
[40CFR 60 Subpart Eb, Section 60.59b]
24. THE OPERATOR SHALL COMPUTE AND RECORD THE FOLLOWING AVERAGES AND PERCENT REDUCTIONS AND MAKE THEM AVAILABLE FOR SUBMITTAL TO THE ADMINISTRATOR OR ON-SITE REVIEW BY AN INSPECTOR:
- A) ALL 24-HOUR DAILY GEOMETRIC AVERAGE SO_x EMISSION CONCENTRATIONS AND ALL 24-HOUR DAILY GEOMETRIC AVERAGE PERCENT REDUCTIONS IN SO_x EMISSIONS AS SPECIFIED IN 60.58b(e).
 - B) ALL 24-HOUR DAILY ARITHMETIC AVERAGE NO_x EMISSION CONCENTRATIONS AS SPECIFIED IN 60.58b(h).
 - C) ALL 4-HOUR BLOCK OR 24-HOUR DAILY ARITHMETIC AVERAGE CO EMISSION CONCENTRATIONS, AS APPLICABLE, AS SPECIFIED UNDER 60.58b(i).
 - D) ALL 4-HOUR BLOCK ARITHMETIC AVERAGE MUNICIPAL WASTE COMBUSTOR UNIT LOAD LEVELS AND PARTICULATE MATTER CONTROL DEVICE INLET TEMPERATURES AS SPECIFIED UNDER 60.58b(i).
[40CFR 60 Subpart Eb, Section 60.59b]

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25. THE OPERATOR SHALL IDENTIFY THE CALENDAR DATES WHEN ANY OF THE AVERAGE EMISSION CONCENTRATIONS, PERCENT REDUCTIONS, OR OPERATING PARAMETERS RECORDED UNDER (d)(2)(ii)(A) THROUGH (d)(2)(ii)(E) OR THE OPACITY LEVELS RECORDED UNDER (d)(2)(i)(A) OF SECTION 60.59b ARE ABOVE APPLICABLE LIMITS, WITH REASONS FOR SUCH EXCEEDENCES AND A DESCRIPTION OF CORRECTIVE ACTIONS TAKEN.
[40CFR 60 Subpart Eb, Section 60.59b]
26. THE OPERATOR SHALL IDENTIFY CALENDAR DATES FOR WHICH THE MINIMUM NUMBER OF HOURS OF ANY OF THE DATA SPECIFIED IN PARAGRAPHS SECTION 60.59b (d)(6)(i) THROUGH (d)(6)(v) HAVE NOT BEEN OBTAINED INCLUDING REASONS FOR NOT OBTAINING SUFFICIENT DATA AND A DESCRIPTION OF CORRECTIVE ACTIONS TAKEN.
[40CFR 60 Subpart Eb, Section 60.59b]
27. THE OPERATOR SHALL IDENTIFY EACH OCCURRENCE THAT SO_x AND NO_x EMISSIONS DATA OR OPERATIONAL DATA (CO EMISSIONS, UNIT LOAD, AND PARTICULATE MATTER CONTROL DEVICE TEMPERATURE) HAVE BEEN EXCLUDED FROM THE CALCULATION OF AVERAGE EMISSION CONCENTRATIONS OR PARAMETERS, AND THE REASONS FOR EXCLUDING THE DATA.
[40CFR 60 Subpart Eb, Section 60.59b]
28. THE OPERATOR SHALL RECORD THE RESULTS OF DAILY DRIFT TESTS AND QUARTERLY ACCURACY DETERMINATIONS FOR SO_x, NO_x AND CO CEMS AS REQUIRED BY APPENDIX F OF THIS SECTION 60.59b, PROCEDURE I.
[40CFR 60 Subpart Eb, Section 60.59b]
29. THE OPERATOR SHALL RECORD THE TEST REPORTS DOCUMENTING THE RESULTS OF THE INITIAL PERFORMANCE TEST AND ALL ANNUAL PERFORMANCE TESTS LISTED IN SECTION 60.59b (d)(9)(i) AND (d)(9)(ii) ALONG WITH SUPPORTING CALCULATIONS.
[40CFR 60 Subpart Eb, Section 60.59b]
30. THE OPERATOR SHALL RECORD THE FOLLOWING:
 - A) RECORDS SHOWING THE NAMES OF THE MW COMBUSTOR CHIEF FACILITY OPERATOR, SHIFT SUPERVISORS, AND CONTROL ROOM OPERATORS WHO HAVE BEEN PROVISIONALLY CERTIFIED BY AN APPROVED CERTIFICATION PROGRAM AS REQUIRED BY 60.54b(a) INCLUDING DATES IF INITIAL AND RENEWAL CERTIFICATIONS.
 - B) RECORDS SHOWING THE NAMES OF THE MW COMBUSTOR CHIEF FACILITY OPERATOR, SHIFT SUPERVISORS, AND CONTROL ROOM OPERATORS WHO HAVE BEEN FULLY CERTIFIED BY AN APPROVED CERTIFICATION PROGRAM AS REQUIRED BY 60.54b(a) INCLUDING DATES IF INITIAL AND RENEWAL CERTIFICATIONS.
 - C) RECORDS SHOWING THE NAMES OF THE MW COMBUSTOR CHIEF FACILITY OPERATOR, SHIFT SUPERVISORS, AND CONTROL ROOM OPERATORS WHO HAVE COMPLETED THE EPA MW COMBUSTOR OPERATOR TRAINING OR APPROVED EQUIVALENT COURSE AS REQUIRED BY 60.54b(d) INCLUDING DOCUMENTATION OF TRAINING COMPLETION.
[40CFR 60 Subpart Eb, Section 60.59b]
31. THE OPERATOR SHALL RECORD THE NAMES OF PERSONS THAT HAVE COMPLETED A REVIEW OF THE OPERATIONS MANUAL AS REQUIRED BY 60.54b(f).
[40CFR 60 Subpart Eb, Section 60.59b]

FACILITY PERMIT TO CONSTRUCT LONG BEACH CITY, SERRF PROJECT

32. CONTROLLED EMISSIONS OF OXIDES OF SULFUR (SO_x) FROM THE COMBUSTOR/BOILER SHALL NOT EXCEED THE MORE STRINGENT OF 17 LB/HR OR 70 PPM, DRY CORRECTED TO 12% CO₂ (3 HOUR AVERAGE), AND THE MORE STRINGENT OF 12 LB/HR OR 26 PPM, DRY CORRECTED TO 12 % CO₂ (8 HOUR AVERAGE).
[RULE 1703 – PSD Analysis][40CFR – 52-21 PSD]

33. CONTROLLED EMISSIONS OF THE FOLLOWING POLLUTANTS IN THE EXHAUST FROM THE SYSTEM SHALL NOT EXCEED THE LIMITS SPECIFIED BELOW:

LEAD	0.08 LBS/HR (3-HOUR AVERAGE)
MERCURY	0.12 LBS/HR ((3-HOUR AVERAGE)
FLUORIDES (AS HYDROGEN FLUORIDE)	1.1 LBS/HR (3-HOUR AVERAGE)

[RULE 1703 – PSD Analysis][40CFR – 52-21 PSD]

34. WITHIN SIXTY (60) DAYS OF INITIAL OPERATION, BUT NOT MORE THAN 180 DAYS AFTER INITIAL STARTUP, THE APPLICANT SHALL CONDUCT PERFORMANCE TESTS IN ACCORDANCE WITH AQMD TEST PROCEDURES AND FURNISH THE AQMD A WRITTEN RESULT OF SUCH PERFORMANCE TESTS WITHIN THIRTY (30) DAYS AFTER THE TESTS ARE CONDUCTED. WRITTEN NOTICE OF THE PERFORMANCE TESTS SHALL BE PROVIDED TO THE AQMD SEVEN (7) DAYS PRIOR TO THE TESTS SO THAT AN OBSERVER MAY BE PRESENT. ALL SOURCE TESTING AND ANALYTICAL METHODS SHALL BE SUBMITTED TO THE AQMD FOR APPROVAL AT LEAST SIXTY (60) DAYS PRIOR TO THE START OF THE TESTS.

THE PERFORMANCE TESTS SHALL BE CONDUCTED AT THE MAXIMUM FLOW RATES ALLOWED BY THIS PERMIT AND SHALL INCLUDE, BUT MAY NOT BE LIMITED TO, A TEST OF THE BOILER EXHAUST FOR:

- A. TOTAL PARTICULATES
 - B. LEAD
 - C. MERCURY
 - D. FLUORIDES (AS HF)
 - E. MOISTURE CONTENT
 - F. TEMPERATURE
 - G. FLOW RATE
- [RULE 1303(b)(2)-OFFSET, 1401]

35. THIS PERMIT SHALL EXPIRE IF CONSTRUCTION OF THIS EQUIPMENT IS NOT COMPLETE WITHIN ONE YEAR FROM THE DATE OF ISSUANCE OF THIS PERMIT UNLESS AN EXTENSION IS GRANTED BY THE AQMD.
[RULE 205]

36. UNCONTROLLED ETHYLENE SHALL NOT BE RELEASED INTO THE ATMOSPHERE FROM THIS EQUIPMENT AT ANY TIME.
[RULE 204]

FACILITY PERMIT TO CONSTRUCT LONG BEACH CITY, SERRF PROJECT

PERMIT TO CONSTRUCT

**Granted as of
A/N 483533**

Equipment Description:

RESOURCE RECOVERY SYSTEM NO. 2 CONSISTING OF:

1. REFUSE RECEIVING HOPPER, CHARGING MUNICIPAL SOLID WASTE FIRED BOILER NO. 2.
2. COMBUSTOR/BOILER NO. 2, MUNICIPAL SOLID WASTE FIRED, L.C. STEINNULLER, WATER WALL TYPE, WITH RECIPROCATING GRATES, TWO NATURAL GAS FIRED AUXILIARY BURNERS WITH A COMBINED RATING OF 2,200,000 SCF/DAY, A MULTI-LEVEL AMMONIA INJECTION SYSTEM, UNDER GRATE PRIMARY COMBUSTION AIR FAN THAT VENTS THE WASTE RECEIVING AND STORAGE SYSTEM, AND OVER FIRE SECONDARY COMBUSTION AIR FAN.
3. CO BURNER, STEINMUELLER, MODEL NO. SSBG40, NATURAL GAS FIRED, 14.5 MM BTU PER HOUR.
4. BOILER SECTION, WATER TUBE TYPE, CONSISTING OF A SUPERHEATER, ECONOMIZER, TUBULAR STEAM COIL AIR PREHEATER, WITH MECHANICAL AND PNEUMATIC RAPPERS, AND EACH WITH A CAPACITY OF 130,000 POUNDS PER HOUR DAILY AVERAGE OF STEAM AT 660 PSIA AND 752 DEGREES FAHRENHEIT.
5. STEAM TURBINE, IMO DELAVAL, MODEL MJ-MZ-SF, 37,504 KW (COMMON TO RESOURCE RECOVERY SYSTEMS NO. 1, 2 AND 3).
6. GENERATOR, GEC ALSTHOM, MODEL T216-255 (COMMON TO RESOURCE RECOVERY SYSTEMS NO. 1, 2 AND 3).
7. AQUEOUS AMMONIA STORAGE TANK, 24,000 GALLON CAPACITY (COMMON TO RESOURCE RECOVERY SYSTEMS NO. 1, 2 AND 3).
8. BOILER IMPULSE CLEANING SYSTEM, GE POWERWAVE+, ETHYLENE GAS FIRED, SPARK IGNITED, 12 POWERWAVE DETONATION UNITS.

Conditions

1. OPERATION OF THIS EQUIPMENT SHALL BE CONDUCTED IN COMPLIANCE WITH ALL DATA AND SPECIFICATIONS SUBMITTED WITH THE APPLICATION UNDER WHICH THIS PERMIT IS ISSUED UNLESS OTHERWISE NOTED BELOW.
[RULE 204]

FACILITY PERMIT TO CONSTRUCT LONG BEACH CITY, SERRF PROJECT

2. THIS EQUIPMENT SHALL BE PROPERLY MAINTAINED AND KEPT IN GOOD OPERATING CONDITION AT ALL TIMES.
[RULE 204]
3. THIS EQUIPMENT SHALL BE OPERATED BY PERSONNEL PROPERLY TRAINED IN ITS OPERATION. THIS FACILITY SHALL BE IN COMPLIANCE WITH THE APPLICABLE OPERATOR REQUIREMENTS AS SPECIFIED UNDER 40 CFR 60.54b.
[RULE 204; 40CFR 60 Subpart Cb]
4. THE COMBUSTOR/BOILER EQUIPMENT SHALL NOT BE OPERATED UNLESS IT IS VENTED ONLY TO AIR POLLUTION CONTROL EQUIPMENT WHICH IS IN FULL USE AND HAS BEEN ISSUED A VALID PERMIT BY THE AQMD.
[RULE 402; RULE 1303(a)(1)-BACT]
5. THE COMBUSTOR/BOILER EQUIPMENT SHALL NOT BE OPERATED UNLESS ALL OF ITS PRIMARY COMBUSTION AIR IS VENTED FROM THE TIPPING HALL AND THE MUNICIPAL SOLID WASTE (REFUSE) PIT OF THE REFUSE RECEIVING AND STORAGE SYSTEM.
[RULE 402]
6. THIS EQUIPMENT MAY ONLY BE USED TO BURN REFUSE COLLECTED FROM RESIDENTIAL SOURCES, COMMERCIAL SOURCES AND OTHER SOURCES AS APPROVED AND IN A MANNER PRESCRIBED IN WRITING BY THE AQMD. ANY MATERIAL SPECIFICALLY DESIGNATED AS HAZARDOUS MATERIAL OR HAZARDOUS WASTE SHALL NOT BE BURNED UNLESS OTHERWISE APPROVED AND IN A MANNER PRESCRIBED IN WRITING BY THE AQMD.
[RULE 204; RULE 1402; 40CFR 60 Subpart Cb]
7. ALL MATERIALS THAT ARE LISTED AS HAZARDOUS BY A FEDERAL OR STATE AGENCY OR APPEAR ON A FEDERAL OR STATE CANDIDATE LIST SHALL BE CONSIDERED "HAZARDOUS MATERIAL" FOR THE PURPOSE OF THIS PERMIT.
[RULE 204]
8. NATURAL GAS SHALL BE FIRED IN THIS COMBUSTOR ONLY FOR THE SUPPORT OF GOOD COMBUSTION OF REFUSE AND FOR PERIODS OF WARM-UP, START-UP AND SHUTDOWN. NATURAL GAS SHALL NOT BE USED FOR THE SOLE PURPOSE OF GENERATING POWER. DAILY NATURAL GAS CONSUMPTION SHALL BE MEASURED AND RECORDED.
[RULE 1303(a)(1)-BACT; RULE 1303(b)(2)-OFFSET]
9. DURING THE WARM-UP PERIOD, NATURAL GAS FIRING MAY CONTINUE UNTIL THE STEAM TURBINE REACHES FULL LOAD. FOR THE PURPOSE OF THIS PERMIT, A WARM-UP SHALL BE DEFINED AS THE PERIOD OF TIME FROM WHICH THE NATURAL GAS BURNER IS INITIALLY FIRED TO THE TIME REFUSE IS FIRST INTRODUCED INTO THE FURNACE.
[RULE 1303(a)(1)-BACT]
10. START-UP BEGINS WHEN THE FACILITY STARTS THE CONTINUOUS BURNING OF REFUSE AND DOES NOT INCLUDE ANY WARM UP PERIOD.
[40CFR 60 Subpart Eb]

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11. SHUTDOWN BEGINS WHEN THE FACILITY CEASES REFUSE CHARGING TO THE COMBUSTOR, UNTIL COMPLETE REFUSE BURNOUT IS ACHIEVED. DURING SHUTDOWN, THE COMBUSTOR SHALL BURN NATURAL GAS UNTIL ALL REFUSE ON THE GRATES HAS BEEN COMBUSTED.
[RULE 1303(a)(1)-BACT; 40CFR 60 Subpart Eb]
12. THE APPLICABLE STANDARDS OF PERFORMANCE UNDER 40CFR 60 SUBPARTS Cb AND Eb, SHALL APPLY AT ALL TIMES EXCEPT DURING PERIODS OF START-UP, SHUTDOWN, OR MALFUNCTION. THE DURATION OF START-UP, SHUTDOWN OR MALFUNCTION PERIODS SHALL COMPLY WITH 40CFR 60 SUBPART Eb SECTION 60.58b.
[40CFR 60 Subpart Cb; 40CFR 60 Subpart Eb]
13. THE COMBUSTOR/BOILER EQUIPMENT SHALL NOT BE OPERATED UNLESS THE SELECTIVE NON-CATALYTIC REDUCTION (SNCR) SYSTEM IS IN OPERATION, EXCEPT DURING THE PERIODS OF WARM-UP, SHUTDOWN OR WHEN THE FLUE GAS TEMPERATURE IS LESS THAN 1,200 DEGREES FAHRENHEIT.
[RULE 1303(a)(1)-BACT]
14. RESIDUE FROM THE GRATES, BOILER HOPPERS, AND SIFTINGS FROM UNDER THE GRATES SHALL BE DISCHARGED ONLY INTO AN ASH QUENCH TANK.
[RULE 402]
15. THE OWNER OR OPERATOR SHALL MAINTAIN AND OPERATE A CONTINUOUS LOAD MONITOR AND RECORDER IN A MANNER PRESCRIBED IN 40 CFR 60.58b, TO MEASURE AND RECORD STEAM FLOW OR FEEDWATER FLOW RATE TO DETERMINE THAT THE RESOURCE RECOVERY SYSTEM IS NOT OPERATING AT A LOAD LEVEL GREATER THAN 110 PERCENT OF THE MAXIMUM DEMONSTRATED MUNICIPAL WASTE COMBUSTOR UNIT LOAD AS DEFINED IN 40 CFR 60.51b EXCEPT AS SPECIFIED UNDER 40 CFR 60.53b(b). THE STEAM FLOW OR FEEDWATER FLOW SHALL BE CALCULATED IN 4-HOUR BLOCK ARITHMETIC AVERAGES.
[40CFR 60 Subpart Cb]
16. THE COMBUSTOR/BOILER SHALL BE OPERATED TO PROVIDE A MINIMUM GAS RETENTION TIME OF ONE SECOND AT A TEMPERATURE ABOVE 1,800 DEGREES FAHRENHEIT, AS SHOWN BY A MINIMUM ROOF TEMPERATURE READING OF 1,000 DEGREES FAHRENHEIT, EXCEPT DURING WARM-UP, START-UP AND SHUTDOWN.
[RULE 1303(a)(1)-BACT]
17. VISIBLE FUGITIVE ASH EMISSIONS FROM AN ASH CONVEYING SYSTEM SHALL NOT EXCEED 5 PERCENT OF THE OBSERVATION PERIOD WHICH IS DEFINED IN 40 CFR 60.58b(k), EXCEPT DURING MAINTENANCE AND REPAIR OF ASH CONVEYING SYSTEMS.
[RULE 402; 40CFR 60 Subpart Cb]
18. ALL RECORDS REQUIRED BY THIS PERMIT OR 40 CFR 60.59b, AS APPLICABLE, INCLUDING BUT NOT LIMITED TO CONDITION NOS. 23 THROUGH 31, SHALL BE MAINTAINED AND KEPT ON FILE FOR A PERIOD OF AT LEAST FIVE YEARS AND SHALL BE MADE AVAILABLE TO AQMD PERSONNEL UPON REQUEST.
[RULE 204; 40CFR 60 Subpart Cb]

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19. THE OWNER OR OPERATOR SHALL COMPLY WITH THE MUNICIPAL WASTE COMBUSTOR OPERATING PRACTICE REQUIREMENTS LISTED IN 40 CFR PART 60.53b (b) AND (c).
[40CFR 60 Subpart Cb]
20. THE OWNER OR OPERATOR SHALL COMPLY WITH THE MUNICIPAL WASTE COMBUSTOR OPERATOR TRAINING AND CERTIFICATION REQUIREMENTS LISTED IN 40 CFR 60.54b (a) THROUGH (g).
[40CFR Subpart Cb]

Periodic Monitoring:

21. THE OPERATOR SHALL CONDUCT AN INSPECTION FOR VISIBLE EMISSIONS FROM ALL STACKS AND OTHER EMISSION POINTS OF THIS EQUIPMENT WHENEVER THERE IS A PUBLIC COMPLAINT OF VISIBLE EMISSIONS, WHENEVER VISIBLE EMISSIONS ARE OBSERVED, AND ON A SEMI-ANNUAL BASIS, AT LEAST, UNLESS THE EQUIPMENT DID NOT OPERATE DURING THE ENTIRE SEMI-ANNUAL PERIOD. THE ROUTINE SEMI-ANNUAL INSPECTION SHALL BE CONDUCTED WHILE THE EQUIPMENT IS IN OPERATION AND DURING DAYLIGHT HOURS. IF ANY VISIBLE EMISSIONS (NOT INCLUDING CONDENSED WATER VAPOR) ARE DETECTED THAT LAST MORE THAN THREE MINUTES IN ANY ONE-HOUR, THE OPERATOR SHALL EITHER:
 - D. VERIFY AND CERTIFY WITHIN 24 HOURS THAT THE EQUIPMENT CAUSING THE EMISSION AND ANY ASSOCIATED AIR POLLUTION CONTROL EQUIPMENT ARE OPERATING NORMALLY ACCORDING TO THEIR DESIGN AND STANDARD PROCEDURES AND UNDER THE SAME CONDITIONS UNDER WHICH COMPLIANCE WAS ACHIEVED IN THE PAST;
 - E. TAKE CORRECTIVE ACTION(S) THAT ELIMINATES THE VISIBLE EMISSIONS WITHIN 24 HOURS AND REPORT THE VISIBLE EMISSIONS AS A POTENTIAL DEVIATION IN ACCORDANCE WITH THE REPORTING REQUIREMENTS IN SECTION K OF THIS PERMIT; OR
 - F. HAVE A CARB-CERTIFIED SMOKE READER DETERMINE COMPLIANCE WITH THE OPACITY STANDARD, USING EPA METHOD 9 OR THE PROCEDURES IN THE CARB MANUAL "VISIBLE EMISSION EVALUATION", WITHIN THREE BUSINESS DAYS AND REPORT ANY DEVIATIONS TO AQMD.

THE OPERATOR SHALL KEEP THE RECORDS IN ACCORDANCE WITH THE RECORDKEEPING REQUIREMENTS IN SECTION K OF THIS PERMIT AND THE FOLLOWING RECORDS:

- E. STACK OR EMISSION POINT IDENTIFICATION;
- F. DESCRIPTION OF ANY CORRECTIVE ACTIONS TAKEN TO ABATE VISIBLE EMISSIONS;
- G. DATE AND TIME VISIBLE EMISSION WAS ABATED; AND
- H. VISIBLE EMISSION OBSERVATION RECORDED BY A CERTIFIED SMOKE READER.
[RULE 3004 (a)(4)]

FACILITY PERMIT TO CONSTRUCT LONG BEACH CITY, SERRF PROJECT

Emissions And Requirements:

22. THIS EQUIPMENT IS SUBJECT TO THE APPLICABLE REQUIREMENTS OF THE FOLLOWING RULES AND REGULATION:
- PM: RULE 404, SEE APPENDIX B FOR EMISSION LIMITS
 - PM: RULE 405, SEE APPENDIX B FOR EMISSION LIMITS
 - PM: 0.1 gr/scf, RULE 409
 - PM: 11 lb/hr AND 0.01 gr/scf, RULE 475
 - PM: 11 lb/hr AND 0.01 gr/scf, RULE 476
 - PM: 0.18 g/dscm, CORRECTED TO 12% CO₂, 40 CFR Subpart E
 - CO: 2000 PPM_v, RULE 407
 - SO_x: 500 PPM_v, RULE 407
 - NO_x: 225 PPM_v, RULE 476
23. THE OPERATOR SHALL RECORD THE FOLLOWING PARAMETERS AND MAKE THEM AVAILABLE FOR SUBMITTAL TO THE ADMINISTRATOR OR ON-SITE REVIEW BY AN INSPECTOR:
- A) ALL 6-MINUTE AVERAGE OPACITY LEVELS AS SPECIFIED IN 60.58b(c).
 - B) ALL 1-HOUR AVERAGE SO_x EMISSION CONCENTRATIONS AS SPECIFIED UNDER 60.58b(e).
 - C) ALL 1-HOUR AVERAGE NO_x EMISSION CONCENTRATIONS AS SPECIFIED UNDER 60.58b(h).
 - D) ALL 1-HOUR AVERAGE CO EMISSION CONCENTRATIONS, MUNICIPAL WASTE COMBUSTOR UNIT LOAD MEASUREMENTS, AND PARTICULATE MATTER CONTROL DEVICE INLET TEMPERATURES AS SPECIFIED UNDER 60.58b(i).
- [40CFR 60 Subpart Eb, Section 60.59b]
24. THE OPERATOR SHALL COMPUTE AND RECORD THE FOLLOWING AVERAGES AND PERCENT REDUCTIONS AND MAKE THEM AVAILABLE FOR SUBMITTAL TO THE ADMINISTRATOR OR ON-SITE REVIEW BY AN INSPECTOR:
- A) ALL 24-HOUR DAILY GEOMETRIC AVERAGE SO_x EMISSION CONCENTRATIONS AND ALL 24-HOUR DAILY GEOMETRIC AVERAGE PERCENT REDUCTIONS IN SO_x EMISSIONS AS SPECIFIED IN 60.58b(e).
 - B) ALL 24-HOUR DAILY ARITHMETIC AVERAGE NO_x EMISSION CONCENTRATIONS AS SPECIFIED IN 60.58b(h).
 - C) ALL 4-HOUR BLOCK OR 24-HOUR DAILY ARITHMETIC AVERAGE CO EMISSION CONCENTRATIONS, AS APPLICABLE, AS SPECIFIED UNDER 60.58b(i).
 - D) ALL 4-HOUR BLOCK ARITHMETIC AVERAGE MUNICIPAL WASTE COMBUSTOR UNIT LOAD LEVELS AND PARTICULATE MATTER CONTROL DEVICE INLET TEMPERATURES AS SPECIFIED UNDER 60.58b(i).
- [40CFR 60 Subpart Eb, Section 60.59b]

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25. THE OPERATOR SHALL IDENTIFY THE CALENDAR DATES WHEN ANY OF THE AVERAGE EMISSION CONCENTRATIONS, PERCENT REDUCTIONS, OR OPERATING PARAMETERS RECORDED UNDER (d)(2)(ii)(A) THROUGH (d)(2)(ii)(E) OR THE OPACITY LEVELS RECORDED UNDER (d)(2)(i)(A) OF SECTION 60.59b ARE ABOVE APPLICABLE LIMITS, WITH REASONS FOR SUCH EXCEEDENCES AND A DESCRIPTION OF CORRECTIVE ACTIONS TAKEN.
[40CFR 60 Subpart Eb, Section 60.59b]
26. THE OPERATOR SHALL IDENTIFY CALENDAR DATES FOR WHICH THE MINIMUM NUMBER OF HOURS OF ANY OF THE DATA SPECIFIED IN PARAGRAPHS SECTION 60.59b (d)(6)(i) THROUGH (d)(6)(v) HAVE NOT BEEN OBTAINED INCLUDING REASONS FOR NOT OBTAINING SUFFICIENT DATA AND A DESCRIPTION OF CORRECTIVE ACTIONS TAKEN.
[40CFR 60 Subpart Eb, Section 60.59b]
27. THE OPERATOR SHALL IDENTIFY EACH OCCURRENCE THAT SO_x AND NO_x EMISSIONS DATA OR OPERATIONAL DATA (CO EMISSIONS, UNIT LOAD, AND PARTICULATE MATTER CONTROL DEVICE TEMPERATURE) HAVE BEEN EXCLUDED FROM THE CALCULATION OF AVERAGE EMISSION CONCENTRATIONS OR PARAMETERS, AND THE REASONS FOR EXCLUDING THE DATA.
[40CFR 60 Subpart Eb, Section 60.59b]
28. THE OPERATOR SHALL RECORD THE RESULTS OF DAILY DRIFT TESTS AND QUARTERLY ACCURACY DETERMINATIONS FOR SO_x, NO_x AND CO CEMS AS REQUIRED BY APPENDIX F OF THIS SECTION 60.59b, PROCEDURE I.
[40CFR 60 Subpart Eb, Section 60.59b]
29. THE OPERATOR SHALL RECORD THE TEST REPORTS DOCUMENTING THE RESULTS OF THE INITIAL PERFORMANCE TEST AND ALL ANNUAL PERFORMANCE TESTS LISTED IN SECTION 60.59b (d)(9)(i) AND (d)(9)(ii) ALONG WITH SUPPORTING CALCULATIONS.
[40CFR 60 Subpart Eb, Section 60.59b]
30. THE OPERATOR SHALL RECORD THE FOLLOWING:
 - A) RECORDS SHOWING THE NAMES OF THE MW COMBUSTOR CHIEF FACILITY OPERATOR, SHIFT SUPERVISORS, AND CONTROL ROOM OPERATORS WHO HAVE BEEN PROVISIONALLY CERTIFIED BY AN APPROVED CERTIFICATION PROGRAM AS REQUIRED BY 60.54b(a) INCLUDING DATES IF INITIAL AND RENEWAL CERTIFICATIONS.
 - B) RECORDS SHOWING THE NAMES OF THE MW COMBUSTOR CHIEF FACILITY OPERATOR, SHIFT SUPERVISORS, AND CONTROL ROOM OPERATORS WHO HAVE BEEN FULLY CERTIFIED BY AN APPROVED CERTIFICATION PROGRAM AS REQUIRED BY 60.54b(a) INCLUDING DATES IF INITIAL AND RENEWAL CERTIFICATIONS.
 - C) RECORDS SHOWING THE NAMES OF THE MW COMBUSTOR CHIEF FACILITY OPERATOR, SHIFT SUPERVISORS, AND CONTROL ROOM OPERATORS WHO HAVE COMPLETED THE EPA MW COMBUSTOR OPERATOR TRAINING OR APPROVED EQUIVALENT COURSE AS REQUIRED BY 60.54b(d) INCLUDING DOCUMENTATION OF TRAINING COMPLETION.[40CFR 60 Subpart Eb, Section 60.59b]
31. THE OPERATOR SHALL RECORD THE NAMES OF PERSONS THAT HAVE COMPLETED A REVIEW OF THE OPERATIONS MANUAL AS REQUIRED BY 60.54b(f).
[40CFR 60 Subpart Eb, Section 60.59b]

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32. CONTROLLED EMISSIONS OF OXIDES OF SULFUR (SO_x) FROM THE COMBUSTOR/BOILER SHALL NOT EXCEED THE MORE STRINGENT OF 17 LB/HR OR 70 PPM, DRY CORRECTED TO 12% CO₂ (3 HOUR AVERAGE), AND THE MORE STRINGENT OF 12 LB/HR OR 26 PPM, DRY CORRECTED TO 12 % CO₂ (8 HOUR AVERAGE).
[RULE 1703 – PSD Analysis][40CFR – 52-21 PSD]
33. CONTROLLED EMISSIONS OF THE FOLLOWING POLLUTANTS IN THE EXHAUST FROM THE SYSTEM SHALL NOT EXCEED THE LIMITS SPECIFIED BELOW:
- | | |
|----------------------------------|-------------------------------|
| LEAD | 0.08 LBS/HR (3-HOUR AVERAGE) |
| MERCURY | 0.12 LBS/HR ((3-HOUR AVERAGE) |
| FLUORIDES (AS HYDROGEN FLUORIDE) | 1.1 LBS/HR (3-HOUR AVERAGE) |
- [RULE 1703 – PSD Analysis][40CFR – 52-21 PSD]
34. WITHIN SIXTY (60) DAYS OF INITIAL OPERATION, BUT NOT MORE THAN 180 DAYS AFTER INITIAL STARTUP, THE APPLICANT SHALL CONDUCT PERFORMANCE TESTS IN ACCORDANCE WITH AQMD TEST PROCEDURES AND FURNISH THE AQMD A WRITTEN RESULT OF SUCH PERFORMANCE TESTS WITHIN THIRTY (30) DAYS AFTER THE TESTS ARE CONDUCTED. WRITTEN NOTICE OF THE PERFORMANCE TESTS SHALL BE PROVIDED TO THE AQMD SEVEN (7) DAYS PRIOR TO THE TESTS SO THAT AN OBSERVER MAY BE PRESENT. ALL SOURCE TESTING AND ANALYTICAL METHODS SHALL BE SUBMITTED TO THE AQMD FOR APPROVAL AT LEAST SIXTY (60) DAYS PRIOR TO THE START OF THE TESTS.
- THE PERFORMANCE TESTS SHALL BE CONDUCTED AT THE MAXIMUM FLOW RATES ALLOWED BY THIS PERMIT AND SHALL INCLUDE, BUT MAY NOT BE LIMITED TO, A TEST OF THE BOILER EXHAUST FOR:
- A. TOTAL PARTICULATES
 - B. LEAD
 - C. MERCURY
 - D. FLUORIDES (AS HF)
 - E. MOISTURE CONTENT
 - F. TEMPERATURE
 - G. FLOW RATE
- [RULE 1303(b)(2)-OFFSET, 1401]
35. THIS PERMIT SHALL EXPIRE IF CONSTRUCTION OF THIS EQUIPMENT IS NOT COMPLETE WITHIN ONE YEAR FROM THE DATE OF ISSUANCE OF THIS PERMIT UNLESS AN EXTENSION IS GRANTED BY THE AQMD.
[RULE 205]
36. UNCONTROLLED ETHYLENE SHALL NOT BE RELEASED INTO THE ATMOSPHERE FROM THIS EQUIPMENT AT ANY TIME.
[RULE 204]

FACILITY PERMIT TO CONSTRUCT LONG BEACH CITY, SERRF PROJECT

PERMIT TO CONSTRUCT

**Granted as of
A/N 483534**

Equipment Description:

RESOURCE RECOVERY SYSTEM NO. 3 CONSISTING OF:

1. REFUSE RECEIVING HOPPER, CHARGING MUNICIPAL SOLID WASTE FIRED BOILER NO. 3.
2. COMBUSTOR/BOILER NO. 3, MUNICIPAL SOLID WASTE FIRED, L.C. STEINNULLER, WATER WALL TYPE, WITH RECIPROCATING GRATES, TWO NATURAL GAS FIRED AUXILIARY BURNERS WITH A COMBINED RATING OF 2,200,000 SCF/DAY, A MULTI-LEVEL AMMONIA INJECTION SYSTEM, UNDER GRATE PRIMARY COMBUSTION AIR FAN THAT VENTS THE WASTE RECEIVING AND STORAGE SYSTEM, AND OVER FIRE SECONDARY COMBUSTION AIR FAN.
3. CO BURNER, STEINMUELLER, MODEL NO. SSBG40, NATURAL GAS FIRED, 14.5 MM BTU PER HOUR.
4. BOILER SECTION, WATER TUBE TYPE, CONSISTING OF A SUPERHEATER, ECONOMIZER, TUBULAR STEAM COIL AIR PREHEATER, WITH MECHANICAL AND PNEUMATIC RAPPERS, AND EACH WITH A CAPACITY OF 130,000 POUNDS PER HOUR DAILY AVERAGE OF STEAM AT 660 PSIA AND 752 DEGREES FAHRENHEIT.
5. STEAM TURBINE, IMO DELAVAL, MODEL MJ-MZ-SF, 37,504 KW (COMMON TO RESOURCE RECOVERY SYSTEMS NO. 1, 2 AND 3).
6. GENERATOR, GEC ALSTHOM, MODEL T216-255 (COMMON TO RESOURCE RECOVERY SYSTEMS NO. 1, 2 AND 3).
7. AQUEOUS AMMONIA STORAGE TANK, 24,000 GALLON CAPACITY (COMMON TO RESOURCE RECOVERY SYSTEMS NO. 1, 2 AND 3).
8. BOILER IMPULSE CLEANING SYSTEM, GE POWERWAVE+, ETHYLENE GAS FIRED, SPARK IGNITED, 12 POWERWAVE DETONATION UNITS.

Conditions

1. OPERATION OF THIS EQUIPMENT SHALL BE CONDUCTED IN COMPLIANCE WITH ALL DATA AND SPECIFICATIONS SUBMITTED WITH THE APPLICATION UNDER WHICH THIS PERMIT IS ISSUED UNLESS OTHERWISE NOTED BELOW.
[RULE 204]

FACILITY PERMIT TO CONSTRUCT LONG BEACH CITY, SERRF PROJECT

2. THIS EQUIPMENT SHALL BE PROPERLY MAINTAINED AND KEPT IN GOOD OPERATING CONDITION AT ALL TIMES.
[RULE 204]
3. THIS EQUIPMENT SHALL BE OPERATED BY PERSONNEL PROPERLY TRAINED IN ITS OPERATION. THIS FACILITY SHALL BE IN COMPLIANCE WITH THE APPLICABLE OPERATOR REQUIREMENTS AS SPECIFIED UNDER 40 CFR 60.54b.
[RULE 204; 40CFR 60 Subpart Cb]
4. THE COMBUSTOR/BOILER EQUIPMENT SHALL NOT BE OPERATED UNLESS IT IS VENTED ONLY TO AIR POLLUTION CONTROL EQUIPMENT WHICH IS IN FULL USE AND HAS BEEN ISSUED A VALID PERMIT BY THE AQMD.
[RULE 402; RULE 1303(a)(1)-BACT]
5. THE COMBUSTOR/BOILER EQUIPMENT SHALL NOT BE OPERATED UNLESS ALL OF ITS PRIMARY COMBUSTION AIR IS VENTED FROM THE TIPPING HALL AND THE MUNICIPAL SOLID WASTE (REFUSE) PIT OF THE REFUSE RECEIVING AND STORAGE SYSTEM.
[RULE 402]
6. THIS EQUIPMENT MAY ONLY BE USED TO BURN REFUSE COLLECTED FROM RESIDENTIAL SOURCES, COMMERCIAL SOURCES AND OTHER SOURCES AS APPROVED AND IN A MANNER PRESCRIBED IN WRITING BY THE AQMD. ANY MATERIAL SPECIFICALLY DESIGNATED AS HAZARDOUS MATERIAL OR HAZARDOUS WASTE SHALL NOT BE BURNED UNLESS OTHERWISE APPROVED AND IN A MANNER PRESCRIBED IN WRITING BY THE AQMD.
[RULE 204; RULE 1402; 40CFR 60 Subpart Cb]
7. ALL MATERIALS THAT ARE LISTED AS HAZARDOUS BY A FEDERAL OR STATE AGENCY OR APPEAR ON A FEDERAL OR STATE CANDIDATE LIST SHALL BE CONSIDERED "HAZARDOUS MATERIAL" FOR THE PURPOSE OF THIS PERMIT.
[RULE 204]
8. NATURAL GAS SHALL BE FIRED IN THIS COMBUSTOR ONLY FOR THE SUPPORT OF GOOD COMBUSTION OF REFUSE AND FOR PERIODS OF WARM-UP, START-UP AND SHUTDOWN. NATURAL GAS SHALL NOT BE USED FOR THE SOLE PURPOSE OF GENERATING POWER. DAILY NATURAL GAS CONSUMPTION SHALL BE MEASURED AND RECORDED.
[RULE 1303(a)(1)-BACT; RULE 1303(b)(2)-OFFSET]
9. DURING THE WARM-UP PERIOD, NATURAL GAS FIRING MAY CONTINUE UNTIL THE STEAM TURBINE REACHES FULL LOAD. FOR THE PURPOSE OF THIS PERMIT, A WARM-UP SHALL BE DEFINED AS THE PERIOD OF TIME FROM WHICH THE NATURAL GAS BURNER IS INITIALLY FIRED TO THE TIME REFUSE IS FIRST INTRODUCED INTO THE FURNACE.
[RULE 1303(a)(1)-BACT]
10. START-UP BEGINS WHEN THE FACILITY STARTS THE CONTINUOUS BURNING OF REFUSE AND DOES NOT INCLUDE ANY WARM UP PERIOD.
[40CFR 60 Subpart Eb]

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11. SHUTDOWN BEGINS WHEN THE FACILITY CEASES REFUSE CHARGING TO THE COMBUSTOR, UNTIL COMPLETE REFUSE BURNOUT IS ACHIEVED. DURING SHUTDOWN, THE COMBUSTOR SHALL BURN NATURAL GAS UNTIL ALL REFUSE ON THE GRATES HAS BEEN COMBUSTED.
[RULE 1303(a)(1)-BACT; 40CFR 60 Subpart Eb]
12. THE APPLICABLE STANDARDS OF PERFORMANCE UNDER 40CFR 60 SUBPARTS Cb AND Eb, SHALL APPLY AT ALL TIMES EXCEPT DURING PERIODS OF START-UP, SHUTDOWN, OR MALFUNCTION. THE DURATION OF START-UP, SHUTDOWN OR MALFUNCTION PERIODS SHALL COMPLY WITH 40CFR 60 SUBPART Eb SECTION 60.58b.
[40CFR 60 Subpart Cb; 40CFR 60 Subpart Eb]
13. THE COMBUSTOR/BOILER EQUIPMENT SHALL NOT BE OPERATED UNLESS THE SELECTIVE NON-CATALYTIC REDUCTION (SNCR) SYSTEM IS IN OPERATION, EXCEPT DURING THE PERIODS OF WARM-UP, SHUTDOWN OR WHEN THE FLUE GAS TEMPERATURE IS LESS THAN 1,200 DEGREES FAHRENHEIT.
[RULE 1303(a)(1)-BACT]
14. RESIDUE FROM THE GRATES, BOILER HOPPERS, AND SIFTINGS FROM UNDER THE GRATES SHALL BE DISCHARGED ONLY INTO AN ASH QUENCH TANK.
[RULE 402]
15. THE OWNER OR OPERATOR SHALL MAINTAIN AND OPERATE A CONTINUOUS LOAD MONITOR AND RECORDER IN A MANNER PRESCRIBED IN 40 CFR 60.58b, TO MEASURE AND RECORD STEAM FLOW OR FEEDWATER FLOW RATE TO DETERMINE THAT THE RESOURCE RECOVERY SYSTEM IS NOT OPERATING AT A LOAD LEVEL GREATER THAN 110 PERCENT OF THE MAXIMUM DEMONSTRATED MUNICIPAL WASTE COMBUSTOR UNIT LOAD AS DEFINED IN 40 CFR 60.51b EXCEPT AS SPECIFIED UNDER 40 CFR 60.53b(b). THE STEAM FLOW OR FEEDWATER FLOW SHALL BE CALCULATED IN 4-HOUR BLOCK ARITHMETIC AVERAGES.
[40CFR 60 Subpart Cb]
16. THE COMBUSTOR/BOILER SHALL BE OPERATED TO PROVIDE A MINIMUM GAS RETENTION TIME OF ONE SECOND AT A TEMPERATURE ABOVE 1,800 DEGREES FAHRENHEIT, AS SHOWN BY A MINIMUM ROOF TEMPERATURE READING OF 1,000 DEGREES FAHRENHEIT, EXCEPT DURING WARM-UP, START-UP AND SHUTDOWN.
[RULE 1303(a)(1)-BACT]
17. VISIBLE FUGITIVE ASH EMISSIONS FROM AN ASH CONVEYING SYSTEM SHALL NOT EXCEED 5 PERCENT OF THE OBSERVATION PERIOD WHICH IS DEFINED IN 40 CFR 60.58b(k), EXCEPT DURING MAINTENANCE AND REPAIR OF ASH CONVEYING SYSTEMS.
[RULE 402; 40CFR 60 Subpart Cb]
18. ALL RECORDS REQUIRED BY THIS PERMIT OR 40 CFR 60.59b, AS APPLICABLE, INCLUDING BUT NOT LIMITED TO CONDITION NOS. 23 THROUGH 31, SHALL BE MAINTAINED AND KEPT ON FILE FOR A PERIOD OF AT LEAST FIVE YEARS AND SHALL BE MADE AVAILABLE TO AQMD PERSONNEL UPON REQUEST.
[RULE 204; 40CFR 60 Subpart Cb]

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19. THE OWNER OR OPERATOR SHALL COMPLY WITH THE MUNICIPAL WASTE COMBUSTOR OPERATING PRACTICE REQUIREMENTS LISTED IN 40 CFR PART 60.53b (b) AND (c).
[40CFR 60 Subpart Cb]
20. THE OWNER OR OPERATOR SHALL COMPLY WITH THE MUNICIPAL WASTE COMBUSTOR OPERATOR TRAINING AND CERTIFICATION REQUIREMENTS LISTED IN 40 CFR 60.54b (a) THROUGH (g).
[40CFR Subpart Cb]

Periodic Monitoring:

21. THE OPERATOR SHALL CONDUCT AN INSPECTION FOR VISIBLE EMISSIONS FROM ALL STACKS AND OTHER EMISSION POINTS OF THIS EQUIPMENT WHENEVER THERE IS A PUBLIC COMPLAINT OF VISIBLE EMISSIONS, WHENEVER VISIBLE EMISSIONS ARE OBSERVED, AND ON A SEMI-ANNUAL BASIS, AT LEAST, UNLESS THE EQUIPMENT DID NOT OPERATE DURING THE ENTIRE SEMI-ANNUAL PERIOD. THE ROUTINE SEMI-ANNUAL INSPECTION SHALL BE CONDUCTED WHILE THE EQUIPMENT IS IN OPERATION AND DURING DAYLIGHT HOURS. IF ANY VISIBLE EMISSIONS (NOT INCLUDING CONDENSED WATER VAPOR) ARE DETECTED THAT LAST MORE THAN THREE MINUTES IN ANY ONE-HOUR, THE OPERATOR SHALL EITHER:
 - G. VERIFY AND CERTIFY WITHIN 24 HOURS THAT THE EQUIPMENT CAUSING THE EMISSION AND ANY ASSOCIATED AIR POLLUTION CONTROL EQUIPMENT ARE OPERATING NORMALLY ACCORDING TO THEIR DESIGN AND STANDARD PROCEDURES AND UNDER THE SAME CONDITIONS UNDER WHICH COMPLIANCE WAS ACHIEVED IN THE PAST;
 - H. TAKE CORRECTIVE ACTION(S) THAT ELIMINATES THE VISIBLE EMISSIONS WITHIN 24 HOURS AND REPORT THE VISIBLE EMISSIONS AS A POTENTIAL DEVIATION IN ACCORDANCE WITH THE REPORTING REQUIREMENTS IN SECTION K OF THIS PERMIT; OR
 - I. HAVE A CARB-CERTIFIED SMOKE READER DETERMINE COMPLIANCE WITH THE OPACITY STANDARD, USING EPA METHOD 9 OR THE PROCEDURES IN THE CARB MANUAL "VISIBLE EMISSION EVALUATION", WITHIN THREE BUSINESS DAYS AND REPORT ANY DEVIATIONS TO AQMD.

THE OPERATOR SHALL KEEP THE RECORDS IN ACCORDANCE WITH THE RECORDKEEPING REQUIREMENTS IN SECTION K OF THIS PERMIT AND THE FOLLOWING RECORDS:

- I. STACK OR EMISSION POINT IDENTIFICATION;
- J. DESCRIPTION OF ANY CORRECTIVE ACTIONS TAKEN TO ABATE VISIBLE EMISSIONS;
- K. DATE AND TIME VISIBLE EMISSION WAS ABATED; AND
- L. VISIBLE EMISSION OBSERVATION RECORDED BY A CERTIFIED SMOKE READER.
[RULE 3004 (a)(4)]

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Emissions And Requirements:

22. THIS EQUIPMENT IS SUBJECT TO THE APPLICABLE REQUIREMENTS OF THE FOLLOWING RULES AND REGULATION:

PM: RULE 404, SEE APPENDIX B FOR EMISSION LIMITS
PM: RULE 405, SEE APPENDIX B FOR EMISSION LIMITS
PM: 0.1 gr/scf, RULE 409
PM: 11 lb/hr AND 0.01 gr/scf, RULE 475
PM: 11 lb/hr AND 0.01 gr/scf, RULE 476
PM: 0.18 g/dscm, CORRECTED TO 12% CO₂, 40 CFR Subpart E
CO: 2000 PPM_v, RULE 407
SO_x: 500 PPM_v, RULE 407
NO_x: 225 PPM_v, RULE 476

23. THE OPERATOR SHALL RECORD THE FOLLOWING PARAMETERS AND MAKE THEM AVAILABLE FOR SUBMITTAL TO THE ADMINISTRATOR OR ON-SITE REVIEW BY AN INSPECTOR:

- A) ALL 6-MINUTE AVERAGE OPACITY LEVELS AS SPECIFIED IN 60.58b(c).
- B) ALL 1-HOUR AVERAGE SO_x EMISSION CONCENTRATIONS AS SPECIFIED UNDER 60.58b(e).
- C) ALL 1-HOUR AVERAGE NO_x EMISSION CONCENTRATIONS AS SPECIFIED UNDER 60.58b(h).
- D) ALL 1-HOUR AVERAGE CO EMISSION CONCENTRATIONS, MUNICIPAL WASTE COMBUSTOR UNIT LOAD MEASUREMENTS, AND PARTICULATE MATTER CONTROL DEVICE INLET TEMPERATURES AS SPECIFIED UNDER 60.58b(i).

[40CFR 60 Subpart Eb, Section 60.59b]

24. THE OPERATOR SHALL COMPUTE AND RECORD THE FOLLOWING AVERAGES AND PERCENT REDUCTIONS AND MAKE THEM AVAILABLE FOR SUBMITTAL TO THE ADMINISTRATOR OR ON-SITE REVIEW BY AN INSPECTOR:

- A) ALL 24-HOUR DAILY GEOMETRIC AVERAGE SO_x EMISSION CONCENTRATIONS AND ALL 24-HOUR DAILY GEOMETRIC AVERAGE PERCENT REDUCTIONS IN SO_x EMISSIONS AS SPECIFIED IN 60.58b(e).
- B) ALL 24-HOUR DAILY ARITHMETIC AVERAGE NO_x EMISSION CONCENTRATIONS AS SPECIFIED IN 60.58b(h).
- C) ALL 4-HOUR BLOCK OR 24-HOUR DAILY ARITHMETIC AVERAGE CO EMISSION CONCENTRATIONS, AS APPLICABLE, AS SPECIFIED UNDER 60.58b(i).
- D) ALL 4-HOUR BLOCK ARITHMETIC AVERAGE MUNICIPAL WASTE COMBUSTOR UNIT LOAD LEVELS AND PARTICULATE MATTER CONTROL DEVICE INLET TEMPERATURES AS SPECIFIED UNDER 60.58b(i).

[40CFR 60 Subpart Eb, Section 60.59b]

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25. THE OPERATOR SHALL IDENTIFY THE CALENDAR DATES WHEN ANY OF THE AVERAGE EMISSION CONCENTRATIONS, PERCENT REDUCTIONS, OR OPERATING PARAMETERS RECORDED UNDER (d)(2)(ii)(A) THROUGH (d)(2)(ii)(E) OR THE OPACITY LEVELS RECORDED UNDER (d)(2)(i)(A) OF SECTION 60.59b ARE ABOVE APPLICABLE LIMITS, WITH REASONS FOR SUCH EXCEEDENCES AND A DESCRIPTION OF CORRECTIVE ACTIONS TAKEN.
[40CFR 60 Subpart Eb, Section 60.59b]
26. THE OPERATOR SHALL IDENTIFY CALENDAR DATES FOR WHICH THE MINIMUM NUMBER OF HOURS OF ANY OF THE DATA SPECIFIED IN PARAGRAPHS SECTION 60.59b (d)(6)(i) THROUGH (d)(6)(v) HAVE NOT BEEN OBTAINED INCLUDING REASONS FOR NOT OBTAINING SUFFICIENT DATA AND A DESCRIPTION OF CORRECTIVE ACTIONS TAKEN.
[40CFR 60 Subpart Eb, Section 60.59b]
27. THE OPERATOR SHALL IDENTIFY EACH OCCURRENCE THAT SO_x AND NO_x EMISSIONS DATA OR OPERATIONAL DATA (CO EMISSIONS, UNIT LOAD, AND PARTICULATE MATTER CONTROL DEVICE TEMPERATURE) HAVE BEEN EXCLUDED FROM THE CALCULATION OF AVERAGE EMISSION CONCENTRATIONS OR PARAMETERS, AND THE REASONS FOR EXCLUDING THE DATA.
[40CFR 60 Subpart Eb, Section 60.59b]
28. THE OPERATOR SHALL RECORD THE RESULTS OF DAILY DRIFT TESTS AND QUARTERLY ACCURACY DETERMINATIONS FOR SO_x, NO_x AND CO CEMS AS REQUIRED BY APPENDIX F OF THIS SECTION 60.59b, PROCEDURE I.
[40CFR 60 Subpart Eb, Section 60.59b]
29. THE OPERATOR SHALL RECORD THE TEST REPORTS DOCUMENTING THE RESULTS OF THE INITIAL PERFORMANCE TEST AND ALL ANNUAL PERFORMANCE TESTS LISTED IN SECTION 60.59b (d)(9)(i) AND (d)(9)(ii) ALONG WITH SUPPORTING CALCULATIONS.
[40CFR 60 Subpart Eb, Section 60.59b]
30. THE OPERATOR SHALL RECORD THE FOLLOWING:
 - A) RECORDS SHOWING THE NAMES OF THE MW COMBUSTOR CHIEF FACILITY OPERATOR, SHIFT SUPERVISORS, AND CONTROL ROOM OPERATORS WHO HAVE BEEN PROVISIONALLY CERTIFIED BY AN APPROVED CERTIFICATION PROGRAM AS REQUIRED BY 60.54b(a) INCLUDING DATES IF INITIAL AND RENEWAL CERTIFICATIONS.
 - B) RECORDS SHOWING THE NAMES OF THE MW COMBUSTOR CHIEF FACILITY OPERATOR, SHIFT SUPERVISORS, AND CONTROL ROOM OPERATORS WHO HAVE BEEN FULLY CERTIFIED BY AN APPROVED CERTIFICATION PROGRAM AS REQUIRED BY 60.54b(a) INCLUDING DATES IF INITIAL AND RENEWAL CERTIFICATIONS.
 - C) RECORDS SHOWING THE NAMES OF THE MW COMBUSTOR CHIEF FACILITY OPERATOR, SHIFT SUPERVISORS, AND CONTROL ROOM OPERATORS WHO HAVE COMPLETED THE EPA MW COMBUSTOR OPERATOR TRAINING OR APPROVED EQUIVALENT COURSE AS REQUIRED BY 60.54b(d) INCLUDING DOCUMENTATION OF TRAINING COMPLETION.
[40CFR 60 Subpart Eb, Section 60.59b]
31. THE OPERATOR SHALL RECORD THE NAMES OF PERSONS THAT HAVE COMPLETED A REVIEW OF THE OPERATIONS MANUAL AS REQUIRED BY 60.54b(f).
[40CFR 60 Subpart Eb, Section 60.59b]

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32. CONTROLLED EMISSIONS OF OXIDES OF SULFUR (SO_x) FROM THE COMBUSTOR/BOILER SHALL NOT EXCEED THE MORE STRINGENT OF 17 LB/HR OR 70 PPM, DRY CORRECTED TO 12% CO₂ (3 HOUR AVERAGE), AND THE MORE STRINGENT OF 12 LB/HR OR 26 PPM, DRY CORRECTED TO 12 % CO₂ (8 HOUR AVERAGE).

[RULE 1703 – PSD Analysis][40CFR – 52-21 PSD]

33. CONTROLLED EMISSIONS OF THE FOLLOWING POLLUTANTS IN THE EXHAUST FROM THE SYSTEM SHALL NOT EXCEED THE LIMITS SPECIFIED BELOW:

LEAD	0.08 LBS/HR (3-HOUR AVERAGE)
MERCURY	0.12 LBS/HR ((3-HOUR AVERAGE)
FLUORIDES (AS HYDROGEN FLUORIDE)	1.1 LBS/HR (3-HOUR AVERAGE)

[RULE 1703 – PSD Analysis][40CFR – 52-21 PSD]

34. WITHIN SIXTY (60) DAYS OF INITIAL OPERATION, BUT NOT MORE THAN 180 DAYS AFTER INITIAL STARTUP, THE APPLICANT SHALL CONDUCT PERFORMANCE TESTS IN ACCORDANCE WITH AQMD TEST PROCEDURES AND FURNISH THE AQMD A WRITTEN RESULT OF SUCH PERFORMANCE TESTS WITHIN THIRTY (30) DAYS AFTER THE TESTS ARE CONDUCTED. WRITTEN NOTICE OF THE PERFORMANCE TESTS SHALL BE PROVIDED TO THE AQMD SEVEN (7) DAYS PRIOR TO THE TESTS SO THAT AN OBSERVER MAY BE PRESENT. ALL SOURCE TESTING AND ANALYTICAL METHODS SHALL BE SUBMITTED TO THE AQMD FOR APPROVAL AT LEAST SIXTY (60) DAYS PRIOR TO THE START OF THE TESTS.

THE PERFORMANCE TESTS SHALL BE CONDUCTED AT THE MAXIMUM FLOW RATES ALLOWED BY THIS PERMIT AND SHALL INCLUDE, BUT MAY NOT BE LIMITED TO, A TEST OF THE BOILER EXHAUST FOR:

- A. TOTAL PARTICULATES
 - B. LEAD
 - C. MERCURY
 - D. FLUORIDES (AS HF)
 - E. MOISTURE CONTENT
 - F. TEMPERATURE
 - G. FLOW RATE
- [RULE 1303(b)(2)-OFFSET, 1401]

35. THIS PERMIT SHALL EXPIRE IF CONSTRUCTION OF THIS EQUIPMENT IS NOT COMPLETE WITHIN ONE YEAR FROM THE DATE OF ISSUANCE OF THIS PERMIT UNLESS AN EXTENSION IS GRANTED BY THE AQMD.

[RULE 205]

36. UNCONTROLLED ETHYLENE SHALL NOT BE RELEASED INTO THE ATMOSPHERE FROM THIS EQUIPMENT AT ANY TIME.

[RULE 204]

FACILITY PERMIT TO CONSTRUCT LONG BEACH CITY, SERRF PROJECT

PERMIT TO CONSTRUCT

**Granted as of
A/N 497354**

Equipment Description:

POWDER ACTIVATED CARBON INJECTION SYSTEM, NORIT, (COMMON TO APC SYSTEM NO. 1, 2 AND 3)
CONSISTING OF:

1. POWDER ACTIVATED CARBON HOLDING SACK, 1200 LBS MAXIMUM HOLDING CAPACITY
2. FEED HOPPER
3. FEEDER, ROTARY SCREW
4. EDUCTOR
5. AIR BLOWER, POWDER CARBON TRANSPORT

Conditions:

1. CONSTRUCTION AND OPERATION OF THIS EQUIPMENT SHALL BE CONDUCTED IN COMPLIANCE WITH ALL DATA AND SPECIFICATIONS SUBMITTED WITH THIS APPLICATION UNDER WHICH THIS PERMIT IS ISSUED UNLESS OTHERWISE NOTED BELOW.
[RULE 204]
2. THIS EQUIPMENT SHALL BE PROPERLY MAINTAINED AND KEPT IN GOOD OPERATING CONDITION AT ALL TIMES.
[RULE 204]
3. OPERATION OF THIS EQUIPMENT SHALL NOT RELEASE FUGITIVE EMISSIONS OF POWDER ACTIVATED CARBON INTO THE ATMOSPHERE.
[RULE 402]
4. THIS EQUIPMENT SHALL BE LOCATED IN AN ENCLOSED BUILDING.
[RULE 402]
5. THE POWDER ACTIVATED CARBON REPLACEMENT SACKS SHALL BE STORED IN AN ENCLOSED BUILDING.
[RULE 402]
6. RECORDS OF THE POWDER ACTIVATED CARBON REPLACEMENT DATES AND USAGE (LBS) SHALL BE KEPT AND MAINTAINED FOR AT LEAST TWO YEARS AND MADE AVAILABLE TO AQMD PERSONNEL UPON REQUEST.
[RULE 1303(b)(2)-OFFSET]

FACILITY PERMIT TO CONSTRUCT LONG BEACH CITY, SERRF PROJECT

PERMIT TO CONSTRUCT

**Granted as of
A/N 497359**

Equipment Description:

AIR POLLUTION CONTROL SYSTEM NO. 1 CONSISTING OF:

1. POWDER ACTIVATED CARBON INJECTION SYSTEM, NORIT, (COMMON TO APC SYSTEM NO. 1, 2 AND 3)
2. ROTARY ATOMIZER NO. 1 WITH CYCLONE INLETS VENTING COMBUSTOR/BOILER NO. 1.
3. SPRAY REACTOR TYPE REACTORS WITH CALCIUM HYDROXIDE INJECTION, EACH SERVING ROTARY ATOMIZER NO. 1.
4. BAGHOUSE NO. 1, WITH TEN COMPARTMENTS, REVERSE AIR CLEANING, 73,416 SQ. FT. OF FILTER AREA.
5. INDUCED DRAFT FAN NO. 1 VENTING RESOURCE RECOVERY SYSTEM NO. 1.

Conditions:

1. OPERATION OF THIS EQUIPMENT SHALL BE CONDUCTED IN COMPLIANCE WITH ALL DATA AND SPECIFICATIONS SUBMITTED WITH THE APPLICATION UNDER WHICH THIS PERMIT IS ISSUED UNLESS OTHERWISE NOTED BELOW.
[RULE 204]
2. THIS EQUIPMENT SHALL BE PROPERLY MAINTAINED AND KEPT IN GOOD OPERATING CONDITION AT ALL TIMES.
[RULE 204]
3. THE OWNER OR OPERATOR SHALL COMPLY WITH THE MUNICIPAL WASTE COMBUSTOR OPERATING PRACTICE REQUIREMENTS LISTED IN 40 CFR 60.53b (b) AND (c).
[40CFR 60 Subpart Cb]
4. THE OWNER OR OPERATOR SHALL COMPLY WITH THE MUNICIPAL WASTE COMBUSTOR OPERATOR TRAINING AND CERTIFICATION REQUIREMENTS LISTED IN 40 CFR 60.54b (a) THROUGH (g).
[40CFR Subpart Cb]
5. DUST OR FLYASH COLLECTED IN THE BAGHOUSE COMPARTMENT HOPPERS AND THE SPRAY REACTOR HOPPER SHALL BE DISCHARGED ONLY INTO CLOSED CONVEYORS AND/OR CONTAINERS EXCEPT DURING MAINTENANCE AND REPAIR OF ASH CONVEYING SYSTEMS.
[RULE 402; RULE 1303(a)(1)-BACT]

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6. A GAUGE SHALL BE MAINTAINED TO INDICATE, IN INCHES OF WATER PRESSURE, THE STATIC PRESSURE DIFFERENTIAL ACROSS THE BAGS.
[RULE 1303(a)(1)-BACT]
7. THE VOLUME OF LIME SLURRY SUPPLIED TO THE ATOMIZERS FOR SO₂ CONTROL SHALL BE CONTINUOUSLY MEASURED AND RECORDED.
[RULE 1303(a)(1)-BACT]
8. A CONTINUOUS MONITORING SYSTEM TO MONITOR AND RECORD MASS EMISSIONS AND CONCENTRATIONS OF NITROGEN OXIDES (NO_x), OXIDES OF SULFUR (SO_x) AND CARBON MONOXIDE (CO) IN THE EXHAUST OF THE COMBUSTOR/BOILER STACK, SHALL BE MAINTAINED AND OPERATED IN A MANNER PRESCRIBED IN 40 CFR 60.58b.
[RULE 476; 40CFR 60 Subpart Cb]
9. A CONTINUOUS OXYGEN MONITOR AND RECORDER, AS APPROVED BY THE AQMD, SHALL BE MAINTAINED AND OPERATED IN A MANNER PRESCRIBED IN 40 CFR 60.58b TO MEASURE CONCENTRATIONS OF OXYGEN IN THE EXHAUST OF THE COMBUSTOR/BOILER STACK.
[40CFR 60 Subpart Cb]
10. A SYSTEM, AS APPROVED BY THE AQMD, SHALL BE OPERATED TO CONVERT AND RECORD THE STACK NITROGEN OXIDES CONCENTRATIONS TO 3% OXYGEN ON A DRY BASIS AND REPORT THE RESULTS IN A MANNER WHICH DEMONSTRATES COMPLIANCE WITH RULE 476.
[RULE 476]
11. THE OWNER OR OPERATOR SHALL MAINTAIN AND OPERATE A CONTINUOUS OPACITY MONITOR AND RECORDER IN A MANNER PRESCRIBED IN 40 CFR 60.58b TO MEASURE OPACITY OF FLUE GAS IN THE EXHAUST OF THE COMBUSTOR/BOILER STACK. THE MEASURED OPACITY SHALL NOT EXCEED 10 PERCENT IN 6-MINUTE AVERAGE.
[40CFR 60 Subpart Cb]
12. THE OWNER OR OPERATOR SHALL MAINTAIN AND OPERATE A CONTINUOUS TEMPERATURE MONITOR IN A MANNER PRESCRIBED IN 40 CFR 60.58b TO MONITOR THE TEMPERATURE OF THE FLUE GAS STREAM AT THE INLET TO EACH PARTICULATE MATTER CONTROL DEVICE FOR THE RESOURCE RECOVERY SYSTEM. THE MONITORED TEMPERATURE SHALL NOT EXCEED 17 DEGREES IN CELSIUS (4-HR BLOCK AVERAGE) ABOVE THE MAXIMUM DEMONSTRATED PARTICULATE MATTER CONTROL DEVICE TEMPERATURE AS DEFINED IN 40 CFR 60.51b EXCEPT AS SPECIFIED UNDER 40 CFR 60.53b(c).
[40CFR 60 Subpart Cb]
13. ALL CONTINUOUS EMISSION MONITORS SHALL BE OPERATED IN ACCORDANCE WITH THE REQUIREMENTS AND OPERATING PROCEDURES AS APPROVED BY THE AQMD.
[40CFR 60 Subpart Cb]
14. CONTROLLED EMISSIONS OF OXIDES OF NITROGEN (NO_x) IN THE AIR POLLUTION CONTROL SYSTEM EXHAUST FROM THIS SYSTEM SHALL NOT EXCEED 225 PPM (15 MINUTES AVERAGE) AT 3% OXYGEN ON A DRY BASIS.
[RULE 476; RULE 1303(b)(2)-OFFSET]

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15. CONTROLLED NO_x EMISSIONS IN THE EXHAUST FROM THE SYSTEM SHALL NOT EXCEED 205 PPMV CORRECTED TO 7% OXYGEN ON A DRY BASIS. WHEN AVERAGING EMISSIONS FROM ALL COMBUSTORS AS ALLOWED IN PART 60.33b(d) OF 40 CFR SUBPART Cb, THE AVERAGED NO_x EMISSIONS SHALL NOT EXCEED 180 PPMV CORRECTED TO 7% OXYGEN ON A DRY BASIS (24-HR DAILY ARITHMETIC AVERAGE).
 [40CFR 60 Subpart Cb]
16. CONTROLLED EMISSIONS OF OXIDES OF SULFUR (SO_x) FROM THE COMBUSTOR/BOILER SHALL NOT EXCEED THE MORE STRINGENT OF 17 LB/HR OR 70 PPM, DRY CORRECTED TO 12% CO₂ (3 HOUR AVERAGE), AND THE MORE STRINGENT OF 12 LB/HR OR 26 PPM, DRY CORRECTED TO 12 % CO₂ (8 HOUR AVERAGE).
 [RULE 1303(b)(2)-OFFSET]
17. CONTROLLED EMISSIONS OF THE FOLLOWING POLLUTANTS IN THE EXHAUST FROM THE SYSTEM SHALL NOT EXCEED THE LIMITS SPECIFIED BELOW. THE FOLLOWING LIMITS ARE CORRECTED TO 7% OXYGEN ON A DRY BASIS UNLESS OTHERWISE INDICATED:

OXIDES OF SULFUR (SO _x)	29 PPMV OR 75% WT. REDUCTION (24-HR DAILY GEOMETRIC MEAN)
PARTICULATE MATTERS (PM)	25 mg/DSCM
DIOXIN/FURAN	30 ng/DSCM
CADMIUM	0.035 mg/DSCM
LEAD	0.40 mg/DSCM
MERCURY	0.05 mg/DSCM OR 85% WT. REDUCTION
HYDROGEN CHLORIDE	29 PPMV OR 95% WT. REDUCTION
FLUORIDE (AS HF)	1.1 LBS/HOUR

[40CFR 60 Subpart Cb]

18. CONTROLLED EMISSIONS OF CARBON MONOXIDE (CO) IN THE EXHAUST FROM THE SYSTEM SHALL NOT EXCEED 100 PPMV (4-HR ARITHMETIC AVERAGE) CORRECTED TO 7% OXYGEN ON A DRY BASIS.
 [40CFR 60 Subpart Cb]
19. THE CONTROLLED EMISSIONS IN THE EXHAUST FROM THIS SYSTEM SHALL NOT EXCEED THE FOLLOWING LIMITS:

<u>CONTAMINANT</u>	<u>LB/DAY</u>
NITROGEN OXIDES	816
PM ₁₀	120
SULFUR OXIDES	288
CARBON MONOXIDE	792
REACTIVE ORGANIC GAS	72
HYDROGEN CHLORIDE	204

[RULE 1303(b)(2)-OFFSET]

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20. VISIBLE FUGITIVE ASH EMISSIONS FROM AN ASH CONVEYING SYSTEM SHALL NOT EXCEED 5 PERCENT OF THE OBSERVATION PERIOD WHICH IS DEFINED IN 40 CFR 60.58b(k), EXCEPT DURING MAINTENANCE AND REPAIR OF ASH CONVEYING SYSTEMS.
[40CFR 60 Subpart Cb]
21. THE AQMD APPROVED SAMPLING PORTS SHALL BE MAINTAINED IN THE FOLLOWING LOCATIONS:
- A. IN THE DUCT FOLLOWING THE COMBUSTOR/BOILER BUT PRECEDING THE SPRAY REACTOR;
 - B. IN THE DUCT FOLLOWING THE SPRAY REACTOR BUT PRECEDING THE BAGHOUSE;
 - C. IN THE EXHAUST STACK;
 - D. IN THE COMBUSTION AIR INLET DUCT BETWEEN THE INTAKE AND THE COMBUSTOR.
[RULE 204]
22. THE OWNER OR OPERATOR OF SOUTHEAST RESOURCE RECOVERY FACILITY (SERRF) SHALL CONDUCT PERFORMANCE TESTS ON AN ANNUAL BASIS IN ACCORDANCE WITH THE AQMD TEST PROCEDURES AND 40 CFR 60.58b. WRITTEN NOTICE OF SUCH PERFORMANCE TESTS SHALL BE PROVIDED TO THE AQMD SEVEN (7) DAYS PRIOR TO THE TEST SO THAT AN OBSERVER MAY BE PRESENT.

THE PERFORMANCE TESTS SHALL INCLUDE, BUT MAY NOT BE LIMITED TO, A TEST OF ONE OF THE THREE COMBUSTOR/BOILER EXHAUST STREAMS FOLLOWING THE BAGHOUSE UNLESS OTHERWISE REQUESTED BELOW FOR THE FOLLOWING POLLUTANTS:

- A. HYDROCARBONS
- B. PARTICULATE MATTER
- C. HYDROGEN CHLORIDE
- D. EXHAUST FLOW RATE, WET AND DRY
- E. POLYNUCLEAR AROMATIC HYDROCARBONS (BENZO-A-PYRENE, BENZO-E-PYRENE, BENZO-A-ANTHRACENE AND CORONENE).
- F. TETRA- THROUGH OCTA-CHLORINATED DIBENZO-P-DIOXINS AND DIBENZOFURANS
- G. HEAVY METALS (ARSENIC, BERYLLIUM, CADMIUM, CHROMIUM, COPPER, LEAD, MERCURY, NICKEL, AND ZINC)
- H. OPACITY
- I. FLUE GAS TEMPERATURE AT THE INLET TO THE BAGHOUSE DURING DIOXIN/FURAN TEST
- J. LOAD LEVEL (STEAM FLOW OR FEEDWATER FLOW) DURING DIOXIN/FURAN TEST
- K. OXIDES OF NITROGEN (NO_x)
- L. OXIDES OF SULFUR (SO_x)
- M. CARBON MONOXIDE
- N. FUGITIVE ASH USING EPA METHOD 22

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IF THE PERFORMANCE TESTS OF ALL THREE COMBUSTION UNITS DEMONSTRATE THAT DIOXIN/FURAN EMISSIONS ARE LESS THAN OR EQUAL TO 7 ng/DSCM (TOTAL MASS) FOR A 2-YEAR PERIOD, THE OWNER OR OPERATOR MAY ELECT TO CONDUCT ANNUAL PERFORMANCE TEST ON ONLY ONE OF THE THREE UNITS. UNDER THIS ALTERNATIVE TESTING SCHEDULE, A DIFFERENT UNIT SHALL BE TESTED IN SEQUENCE EACH YEAR. IF ANY ANNUAL TEST INDICATES DIOXIN/FURAN EMISSIONS EXCEED 7 ng/DSCM (TOTAL MASS), PERFORMANCE TESTS SHALL BE CONDUCTED ON ALL THREE COMBUSTION UNITS UNTIL SERRF CAN QUALIFY FOR THE ALTERNATIVE TESTING SCHEDULE.

[RULE 1303(a)(1)-BACT; 40CFR 60 Subpart Cb]

23. THE OWNER OR OPERATOR OF SERRF SHALL SUBMIT WRITTEN RESULTS OF THE PERFORMANCE TESTS TO THE AQMD BY FEBRUARY 1ST OF EACH YEAR FOLLOWING THE CALENDAR YEAR IN WHICH THE TESTS WERE CONDUCTED. THE OWNER OR OPERATOR OF SERRF SHALL ALSO COMPLY WITH THE REPORTING AND RECORDKEEPING REQUIREMENTS SPECIFIED IN 40 CFR 60.59b, AS APPLICABLE.

[RULE 1303(a)(1)-BACT; 40CFR 60 Subpart Cb]

24. ALL RECORDS REQUIRED BY THIS PERMIT OR 40 CFR 60.59b, AS APPLICABLE, SHALL BE MAINTAINED AND KEPT ON FILE FOR A PERIOD OF AT LEAST FIVE YEARS AND BE MADE AVAILABLE TO AQMD PERSONNEL UPON REQUEST.

[RULE 204; 40CFR 60 Subpart Cb]

Periodic Monitoring:

25. THE OPERATOR SHALL USE THIS EQUIPMENT IN SUCH A MANNER THAT THE DIFFERENTIAL PRESSURE ACROSS THE FILTER DOES NOT EXCEED 15 INCHES WATER COLUMN. THE OPERATOR SHALL DETERMINE AND RECORD THE PARAMETER BEING MONITORED ONCE EVERY WEEK.

[RULE 3004 (a)(4)]

26. THE OPERATOR SHALL PERFORM A BIENNIAL INSPECTION OF THE EQUIPMENT AND BAGS FOR LEAKS, BROKEN OR TORN BAGS AND IMPROPERLY INSTALLED BAGS. ADDITIONAL INSPECTION SHALL BE CONDUCTED WHEN THE STACK OPACITY AS MEASURED BY THE CONTINUOUS OPACITY MONITORING SYSTEM EXCEEDS 5% FOR ONE HOUR OR MORE. THE OPERATOR SHALL KEEP RECORDS, IN A MANNER APPROVED BY THE DISTRICT, FOR THE FOLLOWING PARAMETER(S) OR ITEM(S):

A. THE NAME OF THE PERSON PERFORMING THE INSPECTION AND/OR MAINTENANCE OF THE BAGS;

B. THE DATE, TIME AND RESULTS OF THE INSPECTION; AND THE DATE, TIME AND DESCRIPTION OF ANY MAINTENANCE OR REPAIRS RESULTING FROM THE INSPECTION.

[RULE 3004 (a)(4)]

FACILITY PERMIT TO CONSTRUCT LONG BEACH CITY, SERRF PROJECT

27. THE OPERATOR SHALL KEEP RECORDS, IN A MANNER APPROVED BY THE AQMD, FOR THE FOLLOWING PARAMETER(S) OR ITEM(S):
TO PROVE COMPLIANCE WITH CONDITION 25.
[RULE 3004 (a)(4)]
28. THE OPERATOR SHALL USE THE DUST COLLECTOR IN SUCH A MANNER THAT THE DIFFERENTIAL PRESSURE ACROSS THE FILTER DOES NOT EXCEED 15 INCHES WATER COLUMN. THE OPERATOR SHALL DETERMINE AND RECORD THIS PARAMETER ONCE EVERY WEEK.
[RULE 3004 (a)(4)]

Emissions and Reporting:

1. THIS EQUIPMENT IS SUBJECT TO THE APPLICABLE REQUIREMENTS OF THE FOLLOWING RULES AND REGULATION:

PM: RULE 404, SEE APPENDIX B FOR EMISSION LIMITS
PM: RULE 405, SEE APPENDIX B FOR EMISSION LIMITS

FACILITY PERMIT TO CONSTRUCT LONG BEACH CITY, SERRF PROJECT

PERMIT TO CONSTRUCT

**Granted as of
A/N 497360**

Equipment Description:

AIR POLLUTION CONTROL SYSTEM NO. 2 CONSISTING OF:

1. POWDER ACTIVATED CARBON INJECTION SYSTEM, NORIT, (COMMON TO APC SYSTEM NO. 1, 2 AND 3)
2. ROTARY ATOMIZER NO. 2 WITH CYCLONE INLETS VENTING COMBUSTOR/BOILER NO. 2.
3. SPRAY REACTOR TYPE REACTORS WITH CALCIUM HYDROXIDE INJECTION, EACH SERVING ROTARY ATOMIZER NO. 2.
4. BAGHOUSE NO. 2, WITH TEN COMPARTMENTS, REVERSE AIR CLEANING, 73,416 SQ. FT. OF FILTER AREA.
5. INDUCED DRAFT FAN NO. 2 VENTING RESOURCE RECOVERY SYSTEM NO. 2.

Conditions:

1. OPERATION OF THIS EQUIPMENT SHALL BE CONDUCTED IN COMPLIANCE WITH ALL DATA AND SPECIFICATIONS SUBMITTED WITH THE APPLICATION UNDER WHICH THIS PERMIT IS ISSUED UNLESS OTHERWISE NOTED BELOW.
[RULE 204]
2. THIS EQUIPMENT SHALL BE PROPERLY MAINTAINED AND KEPT IN GOOD OPERATING CONDITION AT ALL TIMES.
[RULE 204]
3. THE OWNER OR OPERATOR SHALL COMPLY WITH THE MUNICIPAL WASTE COMBUSTOR OPERATING PRACTICE REQUIREMENTS LISTED IN 40 CFR 60.53b (b) AND (c).
[40CFR 60 Subpart Cb]
4. THE OWNER OR OPERATOR SHALL COMPLY WITH THE MUNICIPAL WASTE COMBUSTOR OPERATOR TRAINING AND CERTIFICATION REQUIREMENTS LISTED IN 40 CFR 60.54b (a) THROUGH (g).
[40CFR Subpart Cb]
5. DUST OR FLYASH COLLECTED IN THE BAGHOUSE COMPARTMENT HOPPERS AND THE SPRAY REACTOR HOPPER SHALL BE DISCHARGED ONLY INTO CLOSED CONVEYORS AND/OR CONTAINERS EXCEPT DURING MAINTENANCE AND REPAIR OF ASH CONVEYING SYSTEMS.
[RULE 402; RULE 1303(a)(1)-BACT]

FACILITY PERMIT TO CONSTRUCT LONG BEACH CITY, SERRF PROJECT

6. A GAUGE SHALL BE MAINTAINED TO INDICATE, IN INCHES OF WATER PRESSURE, THE STATIC PRESSURE DIFFERENTIAL ACROSS THE BAGS.
[RULE 1303(a)(1)-BACT]
7. THE VOLUME OF LIME SLURRY SUPPLIED TO THE ATOMIZERS FOR SO₂ CONTROL SHALL BE CONTINUOUSLY MEASURED AND RECORDED.
[RULE 1303(a)(1)-BACT]
8. A CONTINUOUS MONITORING SYSTEM TO MONITOR AND RECORD MASS EMISSIONS AND CONCENTRATIONS OF NITROGEN OXIDES (NO_x), OXIDES OF SULFUR (SO_x) AND CARBON MONOXIDE (CO) IN THE EXHAUST OF THE COMBUSTOR/BOILER STACK, SHALL BE MAINTAINED AND OPERATED IN A MANNER PRESCRIBED IN 40 CFR 60.58b.
[RULE 476; 40CFR 60 Subpart Cb]
9. A CONTINUOUS OXYGEN MONITOR AND RECORDER, AS APPROVED BY THE AQMD, SHALL BE MAINTAINED AND OPERATED IN A MANNER PRESCRIBED IN 40 CFR 60.58b TO MEASURE CONCENTRATIONS OF OXYGEN IN THE EXHAUST OF THE COMBUSTOR/BOILER STACK.
[40CFR 60 Subpart Cb]
10. A SYSTEM, AS APPROVED BY THE AQMD, SHALL BE OPERATED TO CONVERT AND RECORD THE STACK NITROGEN OXIDES CONCENTRATIONS TO 3% OXYGEN ON A DRY BASIS AND REPORT THE RESULTS IN A MANNER WHICH DEMONSTRATES COMPLIANCE WITH RULE 476.
[RULE 476]
11. THE OWNER OR OPERATOR SHALL MAINTAIN AND OPERATE A CONTINUOUS OPACITY MONITOR AND RECORDER IN A MANNER PRESCRIBED IN 40 CFR 60.58b TO MEASURE OPACITY OF FLUE GAS IN THE EXHAUST OF THE COMBUSTOR/BOILER STACK. THE MEASURED OPACITY SHALL NOT EXCEED 10 PERCENT IN 6-MINUTE AVERAGE.
[40CFR 60 Subpart Cb]
12. THE OWNER OR OPERATOR SHALL MAINTAIN AND OPERATE A CONTINUOUS TEMPERATURE MONITOR IN A MANNER PRESCRIBED IN 40 CFR 60.58b TO MONITOR THE TEMPERATURE OF THE FLUE GAS STREAM AT THE INLET TO EACH PARTICULATE MATTER CONTROL DEVICE FOR THE RESOURCE RECOVERY SYSTEM. THE MONITORED TEMPERATURE SHALL NOT EXCEED 17 DEGREES IN CELSIUS (4-HR BLOCK AVERAGE) ABOVE THE MAXIMUM DEMONSTRATED PARTICULATE MATTER CONTROL DEVICE TEMPERATURE AS DEFINED IN 40 CFR 60.51b EXCEPT AS SPECIFIED UNDER 40 CFR 60.53b(c).
[40CFR 60 Subpart Cb]
13. ALL CONTINUOUS EMISSION MONITORS SHALL BE OPERATED IN ACCORDANCE WITH THE REQUIREMENTS AND OPERATING PROCEDURES AS APPROVED BY THE AQMD.
[40CFR 60 Subpart Cb]
14. CONTROLLED EMISSIONS OF OXIDES OF NITROGEN (NO_x) IN THE AIR POLLUTION CONTROL SYSTEM EXHAUST FROM THIS SYSTEM SHALL NOT EXCEED 225 PPM (15 MINUTES AVERAGE) AT 3% OXYGEN ON A DRY BASIS.
[RULE 476; RULE 1303(b)(2)-OFFSET]

FACILITY PERMIT TO CONSTRUCT LONG BEACH CITY, SERRF PROJECT

15. CONTROLLED NO_x EMISSIONS IN THE EXHAUST FROM THE SYSTEM SHALL NOT EXCEED 205 PPMV CORRECTED TO 7% OXYGEN ON A DRY BASIS. WHEN AVERAGING EMISSIONS FROM ALL COMBUSTORS AS ALLOWED IN PART 60.33b(d) OF 40 CFR SUBPART Cb, THE AVERAGED NO_x EMISSIONS SHALL NOT EXCEED 180 PPMV CORRECTED TO 7% OXYGEN ON A DRY BASIS (24-HR DAILY ARITHMETIC AVERAGE).
 [40CFR 60 Subpart Cb]
16. CONTROLLED EMISSIONS OF OXIDES OF SULFUR (SO_x) FROM THE COMBUSTOR/BOILER SHALL NOT EXCEED THE MORE STRINGENT OF 17 LB/HR OR 70 PPM, DRY CORRECTED TO 12% CO₂ (3 HOUR AVERAGE), AND THE MORE STRINGENT OF 12 LB/HR OR 26 PPM, DRY CORRECTED TO 12 % CO₂ (8 HOUR AVERAGE).
 [RULE 1303(b)(2)-OFFSET]
17. CONTROLLED EMISSIONS OF THE FOLLOWING POLLUTANTS IN THE EXHAUST FROM THE SYSTEM SHALL NOT EXCEED THE LIMITS SPECIFIED BELOW. THE FOLLOWING LIMITS ARE CORRECTED TO 7% OXYGEN ON A DRY BASIS UNLESS OTHERWISE INDICATED:

OXIDES OF SULFUR (SO _x)	29 PPMV OR 75% WT. REDUCTION (24-HR DAILY GEOMETRIC MEAN)
PARTICULATE MATTERS (PM)	25 mg/DSCM
DIOXIN/FURAN	30 ng/DSCM
CADMIUM	0.035 mg/DSCM
LEAD	0.40 mg/DSCM
MERCURY	0.05 mg/DSCM OR 85% WT. REDUCTION
HYDROGEN CHLORIDE	29 PPMV OR 95% WT. REDUCTION
FLUORIDE (AS HF)	1.1 LBS/HOUR

[40CFR 60 Subpart Cb]

18. CONTROLLED EMISSIONS OF CARBON MONOXIDE (CO) IN THE EXHAUST FROM THE SYSTEM SHALL NOT EXCEED 100 PPMV (4-HR ARITHMETIC AVERAGE) CORRECTED TO 7% OXYGEN ON A DRY BASIS.
 [40CFR 60 Subpart Cb]
19. THE CONTROLLED EMISSIONS IN THE EXHAUST FROM THIS SYSTEM SHALL NOT EXCEED THE FOLLOWING LIMITS:

<u>CONTAMINANT</u>	<u>LB/DAY</u>
NITROGEN OXIDES	816
PM ₁₀	120
SULFUR OXIDES	288
CARBON MONOXIDE	792
REACTIVE ORGANIC GAS	72
HYDROGEN CHLORIDE	204

[RULE 1303(b)(2)-OFFSET]

FACILITY PERMIT TO CONSTRUCT LONG BEACH CITY, SERRF PROJECT

20. VISIBLE FUGITIVE ASH EMISSIONS FROM AN ASH CONVEYING SYSTEM SHALL NOT EXCEED 5 PERCENT OF THE OBSERVATION PERIOD WHICH IS DEFINED IN 40 CFR 60.58b(k), EXCEPT DURING MAINTENANCE AND REPAIR OF ASH CONVEYING SYSTEMS.
[40CFR 60 Subpart Cb]
21. THE AQMD APPROVED SAMPLING PORTS SHALL BE MAINTAINED IN THE FOLLOWING LOCATIONS:
- A. IN THE DUCT FOLLOWING THE COMBUSTOR/BOILER BUT PRECEDING THE SPRAY REACTOR;
 - B. IN THE DUCT FOLLOWING THE SPRAY REACTOR BUT PRECEDING THE BAGHOUSE;
 - C. IN THE EXHAUST STACK;
 - D. IN THE COMBUSTION AIR INLET DUCT BETWEEN THE INTAKE AND THE COMBUSTOR.
[RULE 204]
22. THE OWNER OR OPERATOR OF SOUTHEAST RESOURCE RECOVERY FACILITY (SERRF) SHALL CONDUCT PERFORMANCE TESTS ON AN ANNUAL BASIS IN ACCORDANCE WITH THE AQMD TEST PROCEDURES AND 40 CFR 60.58b. WRITTEN NOTICE OF SUCH PERFORMANCE TESTS SHALL BE PROVIDED TO THE AQMD SEVEN (7) DAYS PRIOR TO THE TEST SO THAT AN OBSERVER MAY BE PRESENT.

THE PERFORMANCE TESTS SHALL INCLUDE, BUT MAY NOT BE LIMITED TO, A TEST OF ONE OF THE THREE COMBUSTOR/BOILER EXHAUST STREAMS FOLLOWING THE BAGHOUSE UNLESS OTHERWISE REQUESTED BELOW FOR THE FOLLOWING POLLUTANTS:

- A. HYDROCARBONS
- B. PARTICULATE MATTER
- C. HYDROGEN CHLORIDE
- D. EXHAUST FLOW RATE, WET AND DRY
- E. POLYNUCLEAR AROMATIC HYDROCARBONS (BENZO-A-PYRENE, BENZO-E-PYRENE, BENZO-A-ANTHRACENE AND CORONENE).
- F. TETRA- THROUGH OCTA-CHLORINATED DIBENZO-P-DIOXINS AND DIBENZOFURANS
- G. HEAVY METALS (ARSENIC, BERYLLIUM, CADMIUM, CHROMIUM, COPPER, LEAD, MERCURY, NICKEL, AND ZINC)
- H. OPACITY
- I. FLUE GAS TEMPERATURE AT THE INLET TO THE BAGHOUSE DURING DIOXIN/FURAN TEST
- J. LOAD LEVEL (STEAM FLOW OR FEEDWATER FLOW) DURING DIOXIN/FURAN TEST
- K. OXIDES OF NITROGEN (NO_x)
- L. OXIDES OF SULFUR (SO_x)
- M. CARBON MONOXIDE
- N. FUGITIVE ASH USING EPA METHOD 22

FACILITY PERMIT TO CONSTRUCT LONG BEACH CITY, SERRF PROJECT

IF THE PERFORMANCE TESTS OF ALL THREE COMBUSTION UNITS DEMONSTRATE THAT DIOXIN/FURAN EMISSIONS ARE LESS THAN OR EQUAL TO 7 ng/DSCM (TOTAL MASS) FOR A 2-YEAR PERIOD, THE OWNER OR OPERATOR MAY ELECT TO CONDUCT ANNUAL PERFORMANCE TEST ON ONLY ONE OF THE THREE UNITS. UNDER THIS ALTERNATIVE TESTING SCHEDULE, A DIFFERENT UNIT SHALL BE TESTED IN SEQUENCE EACH YEAR. IF ANY ANNUAL TEST INDICATES DIOXIN/FURAN EMISSIONS EXCEED 7 ng/DSCM (TOTAL MASS), PERFORMANCE TESTS SHALL BE CONDUCTED ON ALL THREE COMBUSTION UNITS UNTIL SERRF CAN QUALIFY FOR THE ALTERNATIVE TESTING SCHEDULE.

[RULE 1303(a)(1)-BACT; 40CFR 60 Subpart Cb]

23. THE OWNER OR OPERATOR OF SERRF SHALL SUBMIT WRITTEN RESULTS OF THE PERFORMANCE TESTS TO THE AQMD BY FEBRUARY 1ST OF EACH YEAR FOLLOWING THE CALENDAR YEAR IN WHICH THE TESTS WERE CONDUCTED. THE OWNER OR OPERATOR OF SERRF SHALL ALSO COMPLY WITH THE REPORTING AND RECORDKEEPING REQUIREMENTS SPECIFIED IN 40 CFR 60.59b, AS APPLICABLE.

[RULE 1303(a)(1)-BACT; 40CFR 60 Subpart Cb]

24. ALL RECORDS REQUIRED BY THIS PERMIT OR 40 CFR 60.59b, AS APPLICABLE, SHALL BE MAINTAINED AND KEPT ON FILE FOR A PERIOD OF AT LEAST FIVE YEARS AND BE MADE AVAILABLE TO AQMD PERSONNEL UPON REQUEST.

[RULE 204; 40CFR 60 Subpart Cb]

Periodic Monitoring:

25. THE OPERATOR SHALL USE THIS EQUIPMENT IN SUCH A MANNER THAT THE DIFFERENTIAL PRESSURE ACROSS THE FILTER DOES NOT EXCEED 15 INCHES WATER COLUMN. THE OPERATOR SHALL DETERMINE AND RECORD THE PARAMETER BEING MONITORED ONCE EVERY WEEK.

[RULE 3004 (a)(4)]

26. THE OPERATOR SHALL PERFORM A BIENNIAL INSPECTION OF THE EQUIPMENT AND BAGS FOR LEAKS, BROKEN OR TORN BAGS AND IMPROPERLY INSTALLED BAGS. ADDITIONAL INSPECTION SHALL BE CONDUCTED WHEN THE STACK OPACITY AS MEASURED BY THE CONTINUOUS OPACITY MONITORING SYSTEM EXCEEDS 5% FOR ONE HOUR OR MORE. THE OPERATOR SHALL KEEP RECORDS, IN A MANNER APPROVED BY THE DISTRICT, FOR THE FOLLOWING PARAMETER(S) OR ITEM(S):

- A. THE NAME OF THE PERSON PERFORMING THE INSPECTION AND/OR MAINTENANCE OF THE BAGS;
- B. THE DATE, TIME AND RESULTS OF THE INSPECTION; AND THE DATE, TIME AND DESCRIPTION OF ANY MAINTENANCE OR REPAIRS RESULTING FROM THE INSPECTION.

[RULE 3004 (a)(4)]

FACILITY PERMIT TO CONSTRUCT LONG BEACH CITY, SERRF PROJECT

27. THE OPERATOR SHALL KEEP RECORDS, IN A MANNER APPROVED BY THE AQMD, FOR THE FOLLOWING PARAMETER(S) OR ITEM(S):
TO PROVE COMPLIANCE WITH CONDITION 25.
[RULE 3004 (a)(4)]
28. THE OPERATOR SHALL USE THE DUST COLLECTOR IN SUCH A MANNER THAT THE DIFFERENTIAL PRESSURE ACROSS THE FILTER DOES NOT EXCEED 15 INCHES WATER COLUMN. THE OPERATOR SHALL DETERMINE AND RECORD THIS PARAMETER ONCE EVERY WEEK.
[RULE 3004 (a)(4)]

Emissions and Reporting:

1. THIS EQUIPMENT IS SUBJECT TO THE APPLICABLE REQUIREMENTS OF THE FOLLOWING RULES AND REGULATION:

PM: RULE 404, SEE APPENDIX B FOR EMISSION LIMITS
PM: RULE 405, SEE APPENDIX B FOR EMISSION LIMITS

FACILITY PERMIT TO CONSTRUCT LONG BEACH CITY, SERRF PROJECT

PERMIT TO CONSTRUCT

**Granted as of
A/N 497361**

Equipment Description:

AIR POLLUTION CONTROL SYSTEM NO. 3 CONSISTING OF:

1. POWDER ACTIVATED CARBON INJECTION SYSTEM, NORIT, (COMMON TO APC SYSTEM NO. 1, 2 AND 3)
2. ROTARY ATOMIZER NO. 3 WITH CYCLONE INLETS VENTING COMBUSTOR/BOILER NO. 3.
3. SPRAY REACTOR TYPE REACTORS WITH CALCIUM HYDROXIDE INJECTION, EACH SERVING ROTARY ATOMIZER NO. 3.
4. BAGHOUSE NO. 3, WITH TEN COMPARTMENTS, REVERSE AIR CLEANING, 73,416 SQ. FT. OF FILTER AREA.
5. INDUCED DRAFT FAN NO. 3 VENTING RESOURCE RECOVERY SYSTEM NO. 3.

Conditions:

1. OPERATION OF THIS EQUIPMENT SHALL BE CONDUCTED IN COMPLIANCE WITH ALL DATA AND SPECIFICATIONS SUBMITTED WITH THE APPLICATION UNDER WHICH THIS PERMIT IS ISSUED UNLESS OTHERWISE NOTED BELOW.
[RULE 204]
2. THIS EQUIPMENT SHALL BE PROPERLY MAINTAINED AND KEPT IN GOOD OPERATING CONDITION AT ALL TIMES.
[RULE 204]
3. THE OWNER OR OPERATOR SHALL COMPLY WITH THE MUNICIPAL WASTE COMBUSTOR OPERATING PRACTICE REQUIREMENTS LISTED IN 40 CFR 60.53b (b) AND (c).
[40CFR 60 Subpart Cb]
4. THE OWNER OR OPERATOR SHALL COMPLY WITH THE MUNICIPAL WASTE COMBUSTOR OPERATOR TRAINING AND CERTIFICATION REQUIREMENTS LISTED IN 40 CFR 60.54b (a) THROUGH (g).
[40CFR Subpart Cb]
5. DUST OR FLYASH COLLECTED IN THE BAGHOUSE COMPARTMENT HOPPERS AND THE SPRAY REACTOR HOPPER SHALL BE DISCHARGED ONLY INTO CLOSED CONVEYORS AND/OR CONTAINERS EXCEPT DURING MAINTENANCE AND REPAIR OF ASH CONVEYING SYSTEMS.
[RULE 402; RULE 1303(a)(1)-BACT]

FACILITY PERMIT TO CONSTRUCT LONG BEACH CITY, SERRF PROJECT

6. A GAUGE SHALL BE MAINTAINED TO INDICATE, IN INCHES OF WATER PRESSURE, THE STATIC PRESSURE DIFFERENTIAL ACROSS THE BAGS.
[RULE 1303(a)(1)-BACT]
7. THE VOLUME OF LIME SLURRY SUPPLIED TO THE ATOMIZERS FOR SO₂ CONTROL SHALL BE CONTINUOUSLY MEASURED AND RECORDED.
[RULE 1303(a)(1)-BACT]
8. A CONTINUOUS MONITORING SYSTEM TO MONITOR AND RECORD MASS EMISSIONS AND CONCENTRATIONS OF NITROGEN OXIDES (NO_x), OXIDES OF SULFUR (SO_x) AND CARBON MONOXIDE (CO) IN THE EXHAUST OF THE COMBUSTOR/BOILER STACK, SHALL BE MAINTAINED AND OPERATED IN A MANNER PRESCRIBED IN 40 CFR 60.58b.
[RULE 476; 40CFR 60 Subpart Cb]
9. A CONTINUOUS OXYGEN MONITOR AND RECORDER, AS APPROVED BY THE AQMD, SHALL BE MAINTAINED AND OPERATED IN A MANNER PRESCRIBED IN 40 CFR 60.58b TO MEASURE CONCENTRATIONS OF OXYGEN IN THE EXHAUST OF THE COMBUSTOR/BOILER STACK.
[40CFR 60 Subpart Cb]
10. A SYSTEM, AS APPROVED BY THE AQMD, SHALL BE OPERATED TO CONVERT AND RECORD THE STACK NITROGEN OXIDES CONCENTRATIONS TO 3% OXYGEN ON A DRY BASIS AND REPORT THE RESULTS IN A MANNER WHICH DEMONSTRATES COMPLIANCE WITH RULE 476.
[RULE 476]
11. THE OWNER OR OPERATOR SHALL MAINTAIN AND OPERATE A CONTINUOUS OPACITY MONITOR AND RECORDER IN A MANNER PRESCRIBED IN 40 CFR 60.58b TO MEASURE OPACITY OF FLUE GAS IN THE EXHAUST OF THE COMBUSTOR/BOILER STACK. THE MEASURED OPACITY SHALL NOT EXCEED 10 PERCENT IN 6-MINUTE AVERAGE.
[40CFR 60 Subpart Cb]
12. THE OWNER OR OPERATOR SHALL MAINTAIN AND OPERATE A CONTINUOUS TEMPERATURE MONITOR IN A MANNER PRESCRIBED IN 40 CFR 60.58b TO MONITOR THE TEMPERATURE OF THE FLUE GAS STREAM AT THE INLET TO EACH PARTICULATE MATTER CONTROL DEVICE FOR THE RESOURCE RECOVERY SYSTEM. THE MONITORED TEMPERATURE SHALL NOT EXCEED 17 DEGREES IN CELSIUS (4-HR BLOCK AVERAGE) ABOVE THE MAXIMUM DEMONSTRATED PARTICULATE MATTER CONTROL DEVICE TEMPERATURE AS DEFINED IN 40 CFR 60.51b EXCEPT AS SPECIFIED UNDER 40 CFR 60.53b(c).
[40CFR 60 Subpart Cb]
13. ALL CONTINUOUS EMISSION MONITORS SHALL BE OPERATED IN ACCORDANCE WITH THE REQUIREMENTS AND OPERATING PROCEDURES AS APPROVED BY THE AQMD.
[40CFR 60 Subpart Cb]
14. CONTROLLED EMISSIONS OF OXIDES OF NITROGEN (NO_x) IN THE AIR POLLUTION CONTROL SYSTEM EXHAUST FROM THIS SYSTEM SHALL NOT EXCEED 225 PPM (15 MINUTES AVERAGE) AT 3% OXYGEN ON A DRY BASIS.
[RULE 476; RULE 1303(b)(2)-OFFSET]

FACILITY PERMIT TO CONSTRUCT LONG BEACH CITY, SERRF PROJECT

15. CONTROLLED NO_x EMISSIONS IN THE EXHAUST FROM THE SYSTEM SHALL NOT EXCEED 205 PPMV CORRECTED TO 7% OXYGEN ON A DRY BASIS. WHEN AVERAGING EMISSIONS FROM ALL COMBUSTORS AS ALLOWED IN PART 60.33b(d) OF 40 CFR SUBPART Cb, THE AVERAGED NO_x EMISSIONS SHALL NOT EXCEED 180 PPMV CORRECTED TO 7% OXYGEN ON A DRY BASIS (24-HR DAILY ARITHMETIC AVERAGE).
 [40CFR 60 Subpart Cb]
16. CONTROLLED EMISSIONS OF OXIDES OF SULFUR (SO_x) FROM THE COMBUSTOR/BOILER SHALL NOT EXCEED THE MORE STRINGENT OF 17 LB/HR OR 70 PPM, DRY CORRECTED TO 12% CO₂ (3 HOUR AVERAGE), AND THE MORE STRINGENT OF 12 LB/HR OR 26 PPM, DRY CORRECTED TO 12 % CO₂ (8 HOUR AVERAGE).
 [RULE 1303(b)(2)-OFFSET]
17. CONTROLLED EMISSIONS OF THE FOLLOWING POLLUTANTS IN THE EXHAUST FROM THE SYSTEM SHALL NOT EXCEED THE LIMITS SPECIFIED BELOW. THE FOLLOWING LIMITS ARE CORRECTED TO 7% OXYGEN ON A DRY BASIS UNLESS OTHERWISE INDICATED:

OXIDES OF SULFUR (SOX)	29 PPMV OR 75% WT. REDUCTION (24-HR DAILY GEOMETRIC MEAN)
PARTICULATE MATTERS (PM)	25 mg/DSCM
DIOXIN/FURAN	30 ng/DSCM
CADMIUM	0.035 mg/DSCM
LEAD	0.40 mg/DSCM
MERCURY	0.05 mg/DSCM OR 85% WT. REDUCTION
HYDROGEN CHLORIDE	29 PPMV OR 95% WT. REDUCTION
FLUORIDE (AS HF)	1.1 LBS/HOUR

[40CFR 60 Subpart Cb]

18. CONTROLLED EMISSIONS OF CARBON MONOXIDE (CO) IN THE EXHAUST FROM THE SYSTEM SHALL NOT EXCEED 100 PPMV (4-HR ARITHMETIC AVERAGE) CORRECTED TO 7% OXYGEN ON A DRY BASIS.
 [40CFR 60 Subpart Cb]
19. THE CONTROLLED EMISSIONS IN THE EXHAUST FROM THIS SYSTEM SHALL NOT EXCEED THE FOLLOWING LIMITS:

<u>CONTAMINANT</u>	<u>LB/DAY</u>
NITROGEN OXIDES	816
PM ₁₀	120
SULFUR OXIDES	288
CARBON MONOXIDE	792
REACTIVE ORGANIC GAS	72
HYDROGEN CHLORIDE	204

[RULE 1303(b)(2)-OFFSET]

FACILITY PERMIT TO CONSTRUCT LONG BEACH CITY, SERRF PROJECT

20. VISIBLE FUGITIVE ASH EMISSIONS FROM AN ASH CONVEYING SYSTEM SHALL NOT EXCEED 5 PERCENT OF THE OBSERVATION PERIOD WHICH IS DEFINED IN 40 CFR 60.58b(k), EXCEPT DURING MAINTENANCE AND REPAIR OF ASH CONVEYING SYSTEMS.
[40CFR 60 Subpart Cb]
21. THE AQMD APPROVED SAMPLING PORTS SHALL BE MAINTAINED IN THE FOLLOWING LOCATIONS:
- A. IN THE DUCT FOLLOWING THE COMBUSTOR/BOILER BUT PRECEDING THE SPRAY REACTOR;
 - B. IN THE DUCT FOLLOWING THE SPRAY REACTOR BUT PRECEDING THE BAGHOUSE;
 - C. IN THE EXHAUST STACK;
 - D. IN THE COMBUSTION AIR INLET DUCT BETWEEN THE INTAKE AND THE COMBUSTOR.
[RULE 204]
22. THE OWNER OR OPERATOR OF SOUTHEAST RESOURCE RECOVERY FACILITY (SERRF) SHALL CONDUCT PERFORMANCE TESTS ON AN ANNUAL BASIS IN ACCORDANCE WITH THE AQMD TEST PROCEDURES AND 40 CFR 60.58b. WRITTEN NOTICE OF SUCH PERFORMANCE TESTS SHALL BE PROVIDED TO THE AQMD SEVEN (7) DAYS PRIOR TO THE TEST SO THAT AN OBSERVER MAY BE PRESENT.
- THE PERFORMANCE TESTS SHALL INCLUDE, BUT MAY NOT BE LIMITED TO, A TEST OF ONE OF THE THREE COMBUSTOR/BOILER EXHAUST STREAMS FOLLOWING THE BAGHOUSE UNLESS OTHERWISE REQUESTED BELOW FOR THE FOLLOWING POLLUTANTS:
- A. HYDROCARBONS
 - B. PARTICULATE MATTER
 - C. HYDROGEN CHLORIDE
 - D. EXHAUST FLOW RATE, WET AND DRY
 - E. POLYNUCLEAR AROMATIC HYDROCARBONS (BENZO-A-PYRENE, BENZO-E-PYRENE, BENZO-A-ANTHRACENE AND CORONENE).
 - F. TETRA- THROUGH OCTA-CHLORINATED DIBENZO-P-DIOXINS AND DIBENZOFURANS
 - G. HEAVY METALS (ARSENIC, BERYLLIUM, CADMIUM, CHROMIUM, COPPER, LEAD, MERCURY, NICKEL, AND ZINC)
 - H. OPACITY
 - I. FLUE GAS TEMPERATURE AT THE INLET TO THE BAGHOUSE DURING DIOXIN/FURAN TEST
 - J. LOAD LEVEL (STEAM FLOW OR FEEDWATER FLOW) DURING DIOXIN/FURAN TEST
 - K. OXIDES OF NITROGEN (NO_x)
 - L. OXIDES OF SULFUR (SO_x)
 - M. CARBON MONOXIDE
 - N. FUGITIVE ASH USING EPA METHOD 22

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IF THE PERFORMANCE TESTS OF ALL THREE COMBUSTION UNITS DEMONSTRATE THAT DIOXIN/FURAN EMISSIONS ARE LESS THAN OR EQUAL TO 7 ng/DSCM (TOTAL MASS) FOR A 2-YEAR PERIOD, THE OWNER OR OPERATOR MAY ELECT TO CONDUCT ANNUAL PERFORMANCE TEST ON ONLY ONE OF THE THREE UNITS. UNDER THIS ALTERNATIVE TESTING SCHEDULE, A DIFFERENT UNIT SHALL BE TESTED IN SEQUENCE EACH YEAR. IF ANY ANNUAL TEST INDICATES DIOXIN/FURAN EMISSIONS EXCEED 7 ng/DSCM (TOTAL MASS), PERFORMANCE TESTS SHALL BE CONDUCTED ON ALL THREE COMBUSTION UNITS UNTIL SERRF CAN QUALIFY FOR THE ALTERNATIVE TESTING SCHEDULE.

[RULE 1303(a)(1)-BACT; 40CFR 60 Subpart Cb]

23. THE OWNER OR OPERATOR OF SERRF SHALL SUBMIT WRITTEN RESULTS OF THE PERFORMANCE TESTS TO THE AQMD BY FEBRUARY 1ST OF EACH YEAR FOLLOWING THE CALENDAR YEAR IN WHICH THE TESTS WERE CONDUCTED. THE OWNER OR OPERATOR OF SERRF SHALL ALSO COMPLY WITH THE REPORTING AND RECORDKEEPING REQUIREMENTS SPECIFIED IN 40 CFR 60.59b, AS APPLICABLE.

[RULE 1303(a)(1)-BACT; 40CFR 60 Subpart Cb]

24. ALL RECORDS REQUIRED BY THIS PERMIT OR 40 CFR 60.59b, AS APPLICABLE, SHALL BE MAINTAINED AND KEPT ON FILE FOR A PERIOD OF AT LEAST FIVE YEARS AND BE MADE AVAILABLE TO AQMD PERSONNEL UPON REQUEST.

[RULE 204; 40CFR 60 Subpart Cb]

Periodic Monitoring:

25. THE OPERATOR SHALL USE THIS EQUIPMENT IN SUCH A MANNER THAT THE DIFFERENTIAL PRESSURE ACROSS THE FILTER DOES NOT EXCEED 15 INCHES WATER COLUMN. THE OPERATOR SHALL DETERMINE AND RECORD THE PARAMETER BEING MONITORED ONCE EVERY WEEK.

[RULE 3004 (a)(4)]

26. THE OPERATOR SHALL PERFORM A BIENNIAL INSPECTION OF THE EQUIPMENT AND BAGS FOR LEAKS, BROKEN OR TORN BAGS AND IMPROPERLY INSTALLED BAGS. ADDITIONAL INSPECTION SHALL BE CONDUCTED WHEN THE STACK OPACITY AS MEASURED BY THE CONTINUOUS OPACITY MONITORING SYSTEM EXCEEDS 5% FOR ONE HOUR OR MORE. THE OPERATOR SHALL KEEP RECORDS, IN A MANNER APPROVED BY THE DISTRICT, FOR THE FOLLOWING PARAMETER(S) OR ITEM(S):

A. THE NAME OF THE PERSON PERFORMING THE INSPECTION AND/OR MAINTENANCE OF THE BAGS;

B. THE DATE, TIME AND RESULTS OF THE INSPECTION; AND THE DATE, TIME AND DESCRIPTION OF ANY MAINTENANCE OR REPAIRS RESULTING FROM THE INSPECTION.

[RULE 3004 (a)(4)]

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27. THE OPERATOR SHALL KEEP RECORDS, IN A MANNER APPROVED BY THE AQMD, FOR THE FOLLOWING PARAMETER(S) OR ITEM(S):
TO PROVE COMPLIANCE WITH CONDITION 25.
[RULE 3004 (a)(4)]
28. THE OPERATOR SHALL USE THE DUST COLLECTOR IN SUCH A MANNER THAT THE DIFFERENTIAL PRESSURE ACROSS THE FILTER DOES NOT EXCEED 15 INCHES WATER COLUMN. THE OPERATOR SHALL DETERMINE AND RECORD THIS PARAMETER ONCE EVERY WEEK.
[RULE 3004 (a)(4)]

Emissions and Reporting:

1. THIS EQUIPMENT IS SUBJECT TO THE APPLICABLE REQUIREMENTS OF THE FOLLOWING RULES AND REGULATION:

PM: RULE 404, SEE APPENDIX B FOR EMISSION LIMITS
PM: RULE 405, SEE APPENDIX B FOR EMISSION LIMITS